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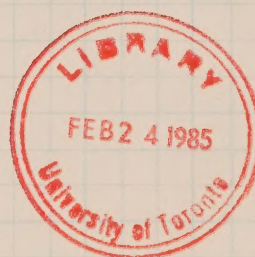
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ERRATA

In Table C.9 of the previous issue of the Air Transport Monitor (Volume 1, Number 4, October 1985), the following changes should be made with respect to the modal return full fare:

- Boston-New York (p. 65) \$120 instead of \$239
- Charlotte-Washington (p. 65) \$276 instead of \$289
- Miami-San Francisco (p. 67) \$869 instead of \$811.

INTRODUCTION

The Air Transport Monitor is prepared by staff of the Passenger Transport Studies and Economic and Social Research Directorates of the Research Branch of the Canadian Transport Commission. It is undertaken with the intent of collecting and disseminating information on service levels, air fares, and air carrier operations as may be of assistance to the consideration of competition and regulation in the Canadian air transport industry.

This is the first issue of the second year of publication of quarterly reports, the first of which was issued in January 1985. The report is divided into five parts.

Part A, "Applications and Decisions", reviews Air Transport Committee decisions relative to the licence authorities of Level I, II, and III air carriers.

Part B, "Services", details scheduled carrier activity at airports in Canada. An index of service convenience is also provided in this part of the report.

Part C, "Pricing", presents information relative to pricing in both the Canadian domestic and the U.S. domestic markets.

Part D, "Operating Performance", reports on domestic scheduled traffic levels.

Part E, "Occasional Papers", reports on the results of work carried out within the Research Branch as well as on trends and developments which may be of particular interest to the consideration of competition and regulation in the Canadian air transport industry.

The present issue can be distinguished from the previous ones by the presence of brief analyses at the beginning of sections A, B, C and D showing the trends and highlights of the Canadian air transport industry during the quarter under study. The goal of this initiative is to give the reader an overview of the air transport market.

All Aviation Statistics Centre (ASC) data not yet published by the ASC should be considered preliminary. Questions pertaining to any aspect of the report or comments regarding possible additional topics which might be included in future issues should be addressed to Sheila Rajani, Canadian Transport Commission, Ottawa, Ontario K1A 0N9 or telephone (819) 997-2830.

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PART A

A P P L I C A T I O N S A N D D E C I S I O N S

This part of the report provides a review of Air Transport Committee (ATC) decisions relative to the licence authorities of Level I, II and III air carriers engaged in offering fixed wing air services or a combination of fixed wing and rotating wing air services. These carriers are identified in Table A.1. Definitions of carrier levels, classes of service and aircraft weight groupings are provided in the first two issues of the Air Transport Monitor (Volume 1, Number 1, January 1985 and Volume 1, Number 2, April 1985).

Part A in this issue of the Monitor is divided into two sections. The first section provides a review of ATC decisions issued from July 1, 1985 to September 30, 1985 with the exception of decisions related to changes of ownership, transfer of licence authorities, changes of name, the transport of cargo and the use of rotating wing aircraft. The decisions have been categorized into the following groups:

Decisions concerning new domestic licence authorities and licence cancellations;

Decisions concerning existing domestic licence authorities:

- Amendments to add point(s) and to delete point(s)
- Amendments to suspend point(s) or lift suspension of point(s)
- Amendments to operating conditions
- Amendments to weight group conditions
- Status of experimental licences;

Decisions concerning new and existing transborder and international licence authorities.

A brief summary of the carrier(s) involved, the application giving rise to each decision, and the results are provided in Tables A.2 through A.4. Table A.5 contains a list of revisions to decisions reported in previous issues.

The second section of Part A presents a descriptive analysis of decisions reported in the Air Transport Monitor to date, i.e. from January 1, 1984 to September 30, 1985. Tables presented in this section can be indicative of trends in recent decisions rendered by the Air Transport Committee and indirectly, in applications submitted to the Committee. The information is presented in such a way as to differentiate levels of carriers, classes of services and areas of operation. In addition, extracts from a number of decisions are used to provide the reader with an appreciation of the extent to which new policy developments have impacted on the ATC decision-making process. It should be noted, however, that the decisions chosen are only examples and should not be taken as anything more than that.

Given the abbreviated nature of this presentation and the inherent problems of attempting to categorize into homogeneous groups many individual events each of which is unique in its own right, the interested reader is encouraged to refer to the actual text of each decision, which can be obtained through the Secretary of the Air Transport Committee, if further details and analysis are required. It should also be noted that this review has been compiled for illustrative and information purposes only and is not to be considered as an authoritative document in any dispute with respect to the actual decisions.

Table A.1

AIR CARRIERS INCLUDED IN THE REVIEW
OF DECISIONS CONCERNING LICENCE AUTHORITIES

Level I

Air Canada
Canadian Pacific Air Lines Limited operating as (o/a) CP Air
Eastern Provincial Airways Ltd.
Nordair Inc.
Pacific Western Airlines Ltd.
Quebecair
Wardair Canada Inc.

Level II

Air Ontario Limited
Austin Airways Limited
Bradley Air Services Limited/First Air
Jim Pattison Industries Ltd. o/a AirBC
Jim Pattison Industries Ltd. o/a Trans-Provincial Airlines Ltd.
North Canada Air Ltd. o/a Norcanair
Northwest Territorial Airways Ltd.
Time Air (1982) Ltd.

Level III

A.T.L.
Aero Arctic Ltd.
Aero Aviation Centre (1981) Ltd.
Aero Trades (Western) Ltd.
Air Alma Inc.
Air Atonabee Limited/Cité Express - City Express
Air Creebec Inc.
Air-Dale Limited
Airgava Ltée - Airgava Ltd.
Air Inuit Ltée - Air Inuit Ltd.
Air Kipawa Inc.
Air Niagara Ltd.
Air Saguenay (1980) Inc.
Air Satellite Inc.
Aklavik Flying Service Limited
Angus Aviation Ltd.
Athabaska Airways Ltd.
Atlantic Airways Limited
Aviation Amos M. et J. Inc.
B.C. Yukon Air Service Ltd.
Bearskin Lake Air Service Ltd.
Bonavair Ltd.
Brooker-Wheaton Aviation Ltd.
Buffalo Airways Ltd.

Burrard Air Ltd.
Business Air Services (Toronto) Limited
Business Air Services Limited
Business Flights Ltd.
Calm Air International Ltd. o/a Calm Air
Canada Jet Charters Ltd.
Central Airways Corp.
Central Air Transport Ltd.
Columbia Airlines Ltd.
Contact Airways Ltd.
Coval Air Ltd.
Eastern Flying Service Limited
Execaire Inc.
Flight Center Victoria
Flightexec Limited
Forest Industries Flying Tankers Limited
Futura Airlines Limited
Georgian Bay Airways
Goose Bay Air Services Limited
Highwood Air Service Ltd.
Ilford-Riverton Airways Ltd.
Innotech Aviation Limited/Innotech Aviation Ltée
Interflite Aviation Ltd.
Interflite Aviation Services Inc.
Johnny May's Air Charters Ltd.
Keewatin Air Limited
Kelowna Flightcraft Air Charter Ltd.
Kenn Borek Air Ltd.
Kinniburgh Spray Service Ltd.
La Ronge Aviation Services Ltd.
Labrador Airways Limited
Landa Aviation
Latham Island Airways Ltd.
Laurentide Aviation Ltd.
Len's Flying School
Les Ailes de Charlevoix Inc.
Maple Air Services Ltd.
Meridian Aviation Ltd.*
Millardair Ltd.
Nahanni Air Services Ltd.
norOntair
North Cariboo Flying Service Ltd.
North Coast Air Services Ltd.
Northern Thunderbird Air Ltd.
Northward Airlines Ltd.
North Western Flying Services Limited
Pacific Rim Airlines
Peace Air Limited
Pem-Air Limited
Peninsula Air Service Limited
Perimeter Airlines (Inland) Ltd.
Perimeter Aviation Ltd.
Powell Air Ltd.

Propair Inc.
Ptarmigan Airways Ltd.
Québec Aviation Ltée/Quebec Aviation Ltd.
Regionair
Rotor Lease Limited*
Rusty Myers Flying Service Ltd.
Simpson Air (1981) Ltd.
Skocdopole Brothers Aviation Ltd.
Skycharter Limited
Skyway Air Services Ltd.
Slate Falls Airways Limited
Soundair Corporation/Commuter Express
South West Air Limited
Southern Frontier Air Transport Ltd. o/a Southern Frontier Airlines
Sundance Aviation Ltd.
Toronto Airways Limited o/a Torontair
Trans North Turbo Air Limited o/a Trans North Air
Tyee Airways Ltd.
Voyageur Airways Limited
Wapiti Aviation Ltd.
Wilderness Airline (1975) Ltd.
Worldways Canada Ltd.

Note: * Meridian Aviation Ltd. and Rotor Lease Limited were deleted from the Aviation Statistics Centre list in August 1985.

Source: Aviation Statistics Centre, Air Carrier Listing, August 1985.

Table A.2

DECISIONS CONCERNING NEW DOMESTIC LICENCE AUTHORITIES
AND LICENCE CANCELLATIONS
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
8969	07-03	Powell Air Ltd.	- application to cancel Licence No. A.T.C. 3237/81(NS), a Class 2 Regular Specific Point commercial air service serving the points Powell River and Vancouver, B.C.--approved.
8989	07-09	Air Niagara Ltd.	- authority to operate a Class 4 Charter and Class 9-4 International Charter commercial air services from a base at Toronto, Ontario using Groups D and E fixed wing aircraft--approved, (see also Table A.4).
9022	07-19	Québec Aviation Ltée/ Quebec Aviation Ltd.	- authority to operate a Class 2 Regular Specific Point commercial air service, using fixed wing aircraft in Groups B and C, serving the points Québec, Sherbrooke and Montréal, P.Q.--approved.
9135	09-03	Nordair Inc.	- authority to operate a Class 4 Charter commercial air service from a base at Winnipeg, Manitoba using fixed wing aircraft in Group F--approved.
9158	09-11	Brooker-Wheaton Aviation Ltd.	- authority to operate Class 4 Charter and Class 9-4 International Charter commercial air services from a base at Calgary International Airport, Calgary, Alberta using fixed wing aircraft in Groups B and C--approved with modification, (see also Table A.4).
9173	09-20	Soundair Corporation	- authority to operate a Class 4 Charter commercial air service in Southern Canada only, from a base at Toronto, Ontario, using fixed wing aircraft in Groups B, C, D, E, F and G--approved.

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9198	09-30	Austin Airways Limited	- authority to operate Class 4 Charter and Class 9-4 International Charter commercial air services from a base at Sioux Lookout, Ontario using Groups B and C fixed wing aircraft-- approved, (see also Table A.4).

Table A.3.1

DECISIONS CONCERNING EXISTING DOMESTIC LICENCE AUTHORITIES:
AMENDMENTS TO ADD POINT(S) AND TO DELETE POINT(S)
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9003	07-12	Time Air (1982) Ltd.	- addition of the points Victoria, Campbell River and Comox, B.C. to Licence No. A.T.C. 3300/81(NS)--approved.
9010	07-23	Nordair Inc.	- application to consolidate Licence Nos. A.T.C. 2844/78(S) and A.T.C. 1852/69(S)--approved.
9025	07-24	North Canada Air Ltd. o/a Norcanair	- application to amend Licence No. A.T.C. 2675/77(S) and consolidate it with Licence No. A.T.C. 3656/84(NS) to operate a Class 1 Scheduled commercial air service serving the points Regina, Saskatoon, Prince Albert, North Battleford and Lloydminster, Saskatchewan; and Edmonton, Alberta--approved.
9041	07-29	Northwest Territorial Airways Ltd.	- addition of point Edmonton, Alberta to Licence No. A.T.C. 3016/79(NS)--approved.
9078	08-16	Québec Aviation Ltée/ Quebec Aviation Ltd.	- application to consolidate Licence Nos. A.T.C. 3297/81(NS), A.T.C. 3306/81(NS), A.T.C. 3670/84(NS) and 3808/84(NS)--approved.
9131	09-03	Austin Airways Limited	- addition of point Elliot Lake, Ontario to Licence No. A.T.C. 3736/84(NS)--approved.
9175	09-20	Jim Pattison Industries Ltd. o/a AirBC	- application (1) to delete the points Namu and Ocean Falls, B.C. from Licence No. A.T.C. 2157/72(NS) and (2) to consolidate Licence Nos. A.T.C. 1588/65(NS), A.T.C. 1695/67(NS), A.T.C. 2157/72(NS), A.T.C. 2224/73(NS), A.T.C. 2338/74(NS), A.T.C. 2353/74(NS) and A.T.C. 3235/81(NS) into one Class 2 Licence authority--approved, (see also Table A.3.4).

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9186	09-24	North Cariboo Flying Services Ltd.	- addition of point Kamloops, B.C. to Licence No. A.T.C. 3185/80(NS)--approved, (see also Table A.3.5).
9196	09-27	Bradley Air Services Limited o/a First Air	- addition of point Ottawa, Ontario to Licence No. A.T.C. 2500/75(NS)--approved, (see also Table A.3.4).
9200	09-30	Jim Pattison Industries Ltd. o/a AirBC	- addition of points Comox, Sandspit and Smithers, B.C. to Licence No. A.T.C. 3235/81(NS)--approved with modification.
9200	09-30	Jim Pattison Industries Ltd. o/a AirBC	- addition of points Calgary, Alberta, Castlegar, Cranbrook, Kamloops, Kelowna and Penticton, B.C. to Licence No. A.T.C. 3235/81(NS)--approved with modification.

Table A.3.2

DECISIONS CONCERNING EXISTING DOMESTIC LICENCE AUTHORITIES:
AMENDMENTS TO SUSPEND POINT(S) OR LIFT SUSPENSION OF POINT(S)
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9028	07-23	Canadian Pacific Air Lines Limited o/a CP Air	- application for suspension of Licence No. A.T.C. 3092/80(S) in respect of the points Vancouver and Victoria, B.C.--approved.
9061	08-06	Quebecair	- application for suspension of Licence Nos. A.T.C. 453/49(S) and A.T.C. 725/54(NS) in respect of the point Gagnon, P.Q.--approved.
9081	08-13	Bonavair Ltd.	- application for suspension of Licence Nos. A.T.C. 2787/77(C) and A.T.C. 685/80(CF)--approved.
9130	08-30	Trans North Turbo Air Limited o/a Trans North Air	- application for suspension of Licence No. A.T.C. 3357/82(CF) from September 30, 1985 to June 1, 1986-- approved.

Table A.3.3

DECISIONS CONCERNING EXISTING DOMESTIC LICENCE AUTHORITIES:
AMENDMENTS TO OPERATING CONDITIONS
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9044	07-26	B.C. Yukon Air Service Limited	- application to amend Licence No. A.T.C. 77/46(C) in respect of the Class 4 Charter commercial air service using fixed wing aircraft in Group C by changing the base of operation from Watson Lake, Yukon to Dease Lake, B.C.--approved with modifications.
9137	09-06	Ptarmigan Airways Ltd.	- application to delete Condition No. 3 from Licence No. A.T.C. 1924/69(NS). Condition No. 3 prohibits the Licensee from providing direct air service between Yellowknife and Hay River, N.W.T.--approved.

Table A.3.4

DECISIONS CONCERNING EXISTING DOMESTIC LICENCE AUTHORITIES:
AMENDMENTS TO WEIGHT GROUP CONDITIONS
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9034	07-29	Kenn Borek Air Ltd.	- authority to amend Licence No. A.T.C. 1681/66(NS) by deleting the restriction with respect to the type of aircraft in Group D--approved.
9073	08-13	Northland Outdoors Canada (1983) Ltd. o/a Ilford-Riverton Airways	- application for a further suspension of Licence Nos. A.T.C. 1207/61(C) and A.T.C. 571/77(CF) in respect of Groups A and C authority, until January 8, 1986--approved.
9123	08-30	Air Creebec Inc.	- authority to also operate Group B aircraft under Licence No. A.T.C. 3379/82(NS)--approved.
9166	09-17	Air Creebec Inc.	- authority to also operate fixed wing aircraft in Groups D and E under Licence No. A.T.C. 2176/72(C)--approved.
9174	09-20	North Canada Air Ltd. o/a Norcanair	- application for suspension of Licence Nos. A.T.C. 552/51(NS), A.T.C. 2198/72(NS), A.T.C. 2197/72(NS) and A.T.C. 2327/74(NS), in respect of the Groups A and B authority, and Licence Nos. A.T.C. 2675/77(S) and A.T.C. 554/51(NS) in respect of the Group B authority, for a period of one year--approved.
9175	09-20	Jim Pattison Industries Ltd. o/a AirBC	- application to delete Group A authority from Licence Nos. A.T.C. 1695/67(NS), A.T.C. 2224/73(NS), A.T.C. 2338/74(NS) and A.T.C. 2353/74(NS)--approved, (see also Table A.3.1).
9196	09-27	Bradley Air Services Limited o/a First Air	- authority to also operate fixed wing aircraft in Group F under Licence No. A.T.C. 2500/75(NS)--approved, (see also Table A.3.1).

Table A.3.5

DECISIONS CONCERNING EXISTING DOMESTIC LICENCE AUTHORITIES:
STATUS OF EXPERIMENTAL LICENCES
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9072	08-14	Quebecair	- application for extension of the authority to contract to Propair Inc. the commercial air services under Licence No. A.T.C. 448/49(NS) for a period of one year--approved.
9186	09-24	North Cariboo Flying Services Ltd.	- application for the amendment of Licence No. A.T.C. 3185/80(NS) by removing Condition No. 2. With respect to Condition No. 2, the licence was issued on an experimental basis for a further period of one year from August 7, 1984 with the onus on the licensee to apply for renewal ninety days prior to the expiry date should it propose to continue to operate the said service--approved, (see also Table A.3.1).

Table A.4

DECISIONS CONCERNING NEW AND EXISTING TRANSBORDER AND
INTERNATIONAL LICENCE AUTHORITIES
JULY 1 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
8988	07-05	Wardair Canada Inc.	- authority to operate a Class 8 International Scheduled commercial air service to transport passengers, cargo, and mail separately or in combination, on a route to be operated in both directions between Canada and the United Kingdom-- approved.
8989	07-09	Air Niagara Ltd.	- authority to operate a Class 4 Charter and Class 9-4 International Charter commercial air services from a base at Toronto, Ontario using Groups D and E fixed wing aircraft-- approved, (see also Table A.2).
8998	07-10	Air Ontario Limited	- authority to operate a Class 9-2 International Regular Specific Point commercial air service serving the points Toronto, Ontario, Canada and Atlantic City, New Jersey, U.S.A. using fixed wing aircraft in Group E--approved.
8998	07-10	Skycharter Limited	- authority to operate a Class 9-3 International Specific Point commercial air service serving the points Toronto, Ontario, Canada and Atlantic City, New Jersey, U.S.A. using fixed wing aircraft in Group D--denied.
9079	08-14	Air Atonabee Limited o/a City Express	- authority to operate a Class 9-2 International Regular Specific Point commercial air service to transport persons, goods and mail using fixed wing aircraft in Groups C, D and E serving the points Toronto (Toronto Island Airport), Ontario and Buffalo, New York, U.S.A.--denied.

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
9100	08-20	Bradley Air Services Limited o/a First Air	- authority to operate a Class 9-2 International Regular Specific Point commercial air service using fixed wing aircraft, between Ottawa, Ontario, Canada and Newark, New Jersey, U.S.A.--approved.
9158	09-11	Brooker-Wheaton Aviation Ltd.	- authority to operate Class 4 Charter and Class 9-4 International Charter commercial air services from a base at Calgary International Airport, Calgary, Alberta using fixed wing aircraft in Groups B and C--approved with modification, (see also Table A.2).
9192	09-26	Canadian Pacific Airlines Limited o/a CP Air	- application (1) for rescission of Order No. 1970-A-8 dated January 7, 1970 and (2) for amendment of Licence No. A.T.B. 33/49(CF) to reflect the new conditions of the Canada/New Zealand agreement signed September 4, 1985--approved.
9198	09-30	Austin Airways Limited	- authority to operate Class 4 Charter and Class 9-4 International Charter commercial air services from a base at Sioux Lookout, Ontario using Groups B and C fixed wing aircraft--approved, (see also Table A.2)

Table A.5

REVISIONS TO DECISIONS REPORTED IN PREVIOUS ISSUES

Volume 1, Number 4, October 1985

Table A.3.4	Decision Number 8894, Skycharter Limited - by amendment dated May 29, 1985, Decision No. 8894 is approved with modification.
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Descriptive Analysis of Decisions Reported in the Monitor

The Monitor, as mentioned earlier, has reported so far on Air Transport Committee decisions on licence authorities for the operation of fixed wing aircraft for Level I, II and III carriers. It has not reviewed decisions on ownership, licence transfers, name changes, cargo transport and the use of helicopters.

The number of carriers classified as being in Levels I, II and III and for which licencing decisions are reported in the Monitor grew from 93 as of December 1984 to 114 as of October 1985. Table A.6 shows that this growth is due solely to an increase in Level III carriers. This increase is explained not by new carriers entering the marketplace, but rather by some carriers in Levels IV to VII having sufficient growth in their 1983 and 1984 gross revenues to be included in Level III in 1985.

Table A.6

NUMBER OF AIR CARRIERS IN LEVELS I, II AND III

<u>No. of carriers as of</u>	<u>Total Level I-III</u>	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
December 1984	93	7	8	78
October 1985	114	7	8	99

Source: Air Transport Monitor, Volume 1, Numbers 1 to 4, Table A.1.1, Volume 2, Number 1, Table A.1.

Thus far, the Monitor has reported 223 decisions issued between January 1, 1984 and September 30, 1985. This total may be broken down by decision category - then further classified according to the level of carrier, the class of licence and the area of operation.

One of the more interesting categories of decisions relates to new licence authorities and licence cancellations. Information on this category is presented in Table A.7. It is noted that the number of decisions for each level reflects the relative importance of each level in the total number of carriers. Although not shown in the table, the applications included requests for new authorities with respect to Class 2, Class 3 and Class 4 licences, with a majority of activity in respect of Class 4 licences (46 per cent in total over the period).¹ Most of the requests for new authorities were found to be for services in Ontario, Quebec and British Columbia. Over the time period of this analysis no new domestic licence authorities in the Maritimes or Yukon Territory were sought by Level I, II and III carriers reported in the Monitor.

Also of interest are decisions that pertain to the amendment of existing licence authorities to add or delete points. Table A.8 shows that in this category the activity among the levels of carriers was more evenly distributed, particularly in 1985. Most of the decisions in this category

Table A.7

SUMMARY OF DECISIONS CONCERNING NEW DOMESTIC LICENCE AUTHORITIES
AND LICENCE CANCELLATIONS
JANUARY 1, 1984 - SEPTEMBER 30, 1985

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>	<u>Total Levels I-III</u>
<u>1984</u>				
First Quarter	0	1	1	2
Second Quarter	0	2	8	10
Third Quarter	2	4	4	10
Fourth Quarter	<u>0</u>	<u>1</u>	<u>7</u>	<u>8</u>
Annual	2	8	20	30
<u>1985</u>				
First Quarter	0	0	3	3
Second Quarter	1	0	2	3
Third Quarter	<u>1</u>	<u>1</u>	<u>5</u>	<u>7</u>
Year-to-date	2	1	10	13

Note: Numbers reported refer to the sum of the number of carriers affected by each decision and not the number of decisions.

Source: Air Transport Monitor, Volume 1, Numbers 1-4, Volume 2, Number 1.

Table A.8

SUMMARY OF DECISIONS CONCERNING AMENDMENTS TO EXISTING LICENCE
AUTHORITIES TO ADD OR DELETE POINTS
JANUARY 1, 1984 - SEPTEMBER 30, 1985

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>	<u>Total Levels I-III</u>
<u>1984</u>				
First Quarter	1	1	7	9
Second Quarter	0	3	5	8
Third Quarter	2	3	1	6
Fourth Quarter	<u>2</u>	<u>3</u>	<u>6</u>	<u>11</u>
Annual	5	10	19	34
<u>1985</u>				
First Quarter	3	1	4	8
Second Quarter	5	3	5	13
Third Quarter	<u>1</u>	<u>8</u>	<u>2</u>	<u>11</u>
Year-to-date	9	12	11	32

Note: Numbers reported refer to the sum of the number of carriers affected by each decision and not the number of decisions.

Source: Air Transport Monitor, Volume 1, Numbers 1 to 4, Volume 2, Number 1.

were for Class 2 and 3 services, 51% and 34% respectively, with a significant number of decisions in 1985 to add or delete points to or from Class 1 services.²

An examination of the applications to add or delete points shows that when the Maritime Provinces are treated as one there was some activity in respect of each of the Provinces/Territories except for the Yukon.³ Most of the activity, however, centered around Ontario, with Quebec and British Columbia being above the average.

The activity in the other decision categories reported on in the Monitor is shown in Table A.9. Of note is the large number of decisions in category A.3.4 on amendments to aircraft group weight restrictions in the first quarter of 1985. An explanation for this occurrence is given later in the discussion on new policy directives. The level of activity on new and existing transborder and international licence authorities--category A.4, is in part a reflection of changes within the existing Canada-U.S. bilateral agreement.

Although a significant portion of the activity in respect of decisions reported in the Monitor has been in respect of Level III carriers, one must not lose perspective of the fact that most traffic in Canada is carried by the major carriers i.e., Level I and II carriers. An effort, therefore, has been made to detail the activity of these carriers in Table A.10.

The Air Transport Committee rendered 41 decisions on applications from Level I carriers between the first quarter of 1984 and the third quarter of 1985. Of these 41, 13 concerned Quebecair, ten concerned Nordair and ten concerned Pacific Western Airlines. It seems that the applications from the Level I carriers were mostly concerned with the addition of points to existing domestic licence authorities and new and existing transborder and international licence authorities. No decision concerning amendments to weight group conditions was rendered by the Committee. Since the first quarter of 1984, no application concerning new licences or amendments to existing domestic licences was received from Air Canada.

The Air Transport Committee rendered an important number of decisions concerning Austin Airways Limited between the first quarter of 1984 and the third quarter of 1985. Of the 55 decisions on Level II carriers reported in the Monitor, 13 concerned Austin Airways Limited and 12 were with respect to AirBC. Several decisions related to Level II carriers concerned addition or deletion of points to domestic licence authorities. There were many decisions on amendments to weight group conditions and several of these were on the Committee's own motion. An explanation of why the Committee did this is given later. There were no decisions concerning amendments to suspend points or lift the suspension of points. Finally, Level II carriers made twice as many applications as Level I carriers for new domestic licence authorities or licence cancellations.

Decisions on changes in ownership, as previously noted, have not as yet been reported in the Monitor. There were, however, a number of decisions in this category and they deserve attention. From the first quarter of 1984

Table A.9

SUMMARY OF THE OTHER CATEGORIES OF DECISIONS REPORTED
IN THE AIR TRANSPORT MONITOR
JANUARY 1, 1984 - SEPTEMBER 30, 1985

	<u>Decision Category</u>				
	<u>A.3.2</u>	<u>A.3.3</u>	<u>A.3.4</u>	<u>A.3.5</u>	<u>A.4</u>
<u>1984</u>					
First Quarter	4	1	7	0	3
Second Quarter	2	5	6	0	3
Third Quarter	4	2	8	4	13
Fourth Quarter	<u>2</u>	<u>4</u>	<u>6</u>	<u>4</u>	<u>4</u>
Annual	12	12	27	8	23
<u>1985</u>					
First Quarter	2	5	25	1	4
Second Quarter	6	1	3	0	0
Third Quarter	<u>4</u>	<u>2</u>	<u>7</u>	<u>2</u>	<u>9</u>
Year-to-date	12	8	35	3	13

Notes: Categories A.3.2 to A.3.5 refer to decisions concerning existing domestic licence authorities to:

- A.3.2 - amendments to suspend points or lift suspension of point(s)
- A.3.3 - amendments to operating conditions
- A.3.4 - amendments to weight group conditions
- A.3.5 - status of experimental licences.

Category A.4 refers to decisions concerning new and existing transborder and international licence authorities.

Numbers reported refer to the sum of the number of carriers affected by each decision and not the number of decisions.

Source: Air Transport Monitor, Volume 1, Numbers 1 to 4 and Volume 2, Number 1.

Table A.10
SUMMARY OF DECISIONS RENDERED BY THE AIR TRANSPORT COMMITTEE
AND REPORTED IN THE AIR TRANSPORT MONITOR -
LEVEL I AND II CARRIERS
JANUARY 1, 1984 - SEPTEMBER 30, 1985

Carrier	Decision Category						
	A.2	A.3.1	A.3.2	A.3.3	A.3.4	A.3.5	A.4
<u>Level I</u>							
Air Canada							3
Canadian Pacific Air Lines Limited o/a CP Air			2				1
Eastern Provincial Airways Ltd.		2					
Nordair Ltée - Nordair Ltd.	2	4	2	1		1	2
Pacific Western Airlines Ltd.	1	3	1	3		1	1
Quebecair	1	5	1	1		3	2
Wardair Canada Inc.						1	2
<u>Level II</u>							
Air Ontario Limited	1	1					2
Austin Airways Limited	4	5		1	3		2
Bradley Air Services Limited o/a First Air	1	2			1		2
Jim Pattison Industries Ltd. o/a AirBC	1	5			5	1	1
Jim Pattison Industries Ltd. o/a Trans-Provincial Airlines Ltd.	1			1	8	1	
North Canada Air Ltd. o/a Norcanair	1	1					1
Northwest Territorial Airways Ltd.		2					
Time Air (1982) Ltd.	1	3			1	1	

Notes: Numbers reported refer to decisions.

The same decision can be reported under more than one carrier or more than one category.

Source: Air Transport Monitor, Volume 1, Number 1 to 4, Volume 2, Number 1.

to the third quarter of 1985, 17 decisions concerning changes of control of Level I, II and III air carriers were issued, 16 of which were approvals. There were also four amalgamations authorized by the Air Transport Committee over the same period. Table A.11 summarizes the information concerning these changes.

Eastern Provincial Airways Limited, Quebecair, Pacific Western Airlines Ltd. and Nordair Ltd. were Level I carriers who had their control modified. For Level II carriers, only Time Air and Norcanair experienced a change of control between January 1, 1984 and September 30, 1985.

To date, the Air Transport Monitor, has reported only on decisions concerning Level I, II and III carriers. Air carriers' operations, however, can also be regulated by Committee's orders. In fact, from the first quarter of 1984 to the third quarter of 1985, 155 orders concerning Level I, II and III air carriers were issued by the Air Transport Committee. Several of them ruled on tariff increases; others asked carriers to show cause on some aspect of their operations. Several licences were suspended and some suspensions were cancelled. A few air licences were amended or simply abolished. Finally, some orders cancelled older orders. Table A.12 presents only those orders which amended or cancelled decisions reported in the Air Transport Monitor or cancelled unit-toll or charter licence authorisations.

Table A.11

DECISIONS CONCERNING CHANGES OF CONTROL AND AMALGAMATIONS
JANUARY 1, 1984 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
7835	01-26-84	Bonavair Ltd.	- change of control from Grant F. Roy to Trentair Limited - Licence Nos. A.T.C. 2787/77(C) and A.T.C. 685/80(CF)--not disallowed.
7848	01-30-84	Contact Airways Ltd.	- change of control from Nu Mille Land Development to Nu Mille Land Development Ltd., R. Vargo Investments Ltd., Fred Weatherup and Enerson Motors Ltd. and a subsequent change of control to R. Vargo Investments Ltd. - Licence Nos. A.T.C. 1141/60(C) and A.T.C. 698/80(CF) -- not disallowed.
7874	02-14-84	Time Air (1982) Ltd.	- change of control from 47851 Alberta Ltd. to 47851 Alberta Ltd., Pacific Western Airlines Ltd. and the employees of Time Air (1982) Ltd. - Licence No. A.T.C. 1645/66(NS) -- not disallowed.
7892	02-28-84	Soundair Corporation	- change of control from Brian Child to New - Kirk Corporation -Licence Nos. A.T.C. 2248/73 and A.T.C. 501/74(CF) -- not disallowed.
7992	05-03-84	North Canada Air Ltd. o/a Norcanair	- change of control from 559397 Saskatchewan Ltd. to High-Line Airways Inc. - Licence Nos. A.T.C. 2327/74(NS), A.T.C. 628/52(C), A.T.C. 1845/69(C), A.T.C. 75/51(CF), A.T.C. 2605/76(C), A.T.C. 2675/77(S), A.T.C. 291/47(C), A.T.C. 257/60(CF), A.T.C. 552/51(NS), A.T.C. 554/51(NS), A.T.C. 341/48(C), A.T.C. 2198/72(NS) and A.T.C. 2197/72(NS) -- not disallowed.

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
8093	06-13-84	Air Atonabee Ltd.	- change of control from Joseph D. Csumrik, Beatrice W. Csumrik and Cargowall Ltd. to City Wings Ltd. - Licence Nos. A.T.C. 2140/72(C), A.T.C. 462/72(CF), A.T.C. 3198/80(NS), A.T.C. 3115/80(NS) and A.T.C. 2325/74(NS) -- not disallowed.
8159	07-09-84	North Cariboo Flying Service Ltd.	- change of control from Harley Koons, Peter Scheiwiller and Daniel Wuthrich to Tipton Lee Golias - Licence Nos. A.T.C. 894/58(C), A.T.C. 622/78(CF), A.T.C. 3185/80(NS), A.T.C. 3316/81(C) and A.T.C. 756/81(CF) - - disallowed.
8262	08-15-84	Ilford-Riverton Airways Ltd. and Northland Outdoors of Canada Ltd.	- amalgamation of Ilford - Riverton Airways Ltd. and Northland Outdoors of Canada Ltd. into one company to be known as Ilford - Riverton Airways Ltd. -- approved.
8285	08-22-84	Labrador Airways Limited	- change of control from Wardlynn Holdings Limited to Northern Air Services Limited - Licence Nos. A.T.C. 1272/61(C), A.T.C. 322/63(CF), A.T.C. 2036/70(C), A.T.C. 466/50(NS), A.T.C. 2347/74(NS) and A.T.C. 3498/83(C) -- not disallowed.
8292	08-23-84	Eastern Provincial Airways Limited	- change of control from Newfoundland Capital Corporation Limited to Canadian Pacific Air Lines Limited -- Licence Nos. A.T.C. 12/45(S), A.T.C. 2481/75(S), A.T.C. 2482/75(S), A.T.C. 768/55(NS), A.T.C. 461/49(C), A.T.C. 2745/77(C), A.T.C. 162/51(CF), A.T.C. 103/51(CF), A.T.C. 163/51(CF) and A.T.C. 791/82(CF) -- not disallowed.

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
8348	09-17-84	Business Flights Ltd., Chinook Air Services (1981) Ltd., Executive Flight Centre Ltd.	- amalgamation of Business Flights Ltd. and Chinook Air Services (1981) Ltd. to form a company to be known as Business Flights Ltd. and the subsequent amalgamation of Business Flights Ltd. and Executive Flight Centre Ltd. to form a company to be known as Westair Resources Ltd. proposing to carry on business under the firm name and style of Business Flights -- not disallowed.
8361	09-25-84	Quebecair	- change of control from Les Investissements Lemah Inc., Expeditex Inc., Société D'investissement Desjardins and Corporation Provost Ltée to Société Québécoise Des Transports - Licence Nos. A.T.C. 453/49(S), A.T.C. 448/49(NS), A.T.C. 725/54(NS), A.T.C. 1032/59(NS), A.T.C. 2249/73(NS), A.T.C. 2250/73(NS), A.T.C. 32/46(C), A.T.C. 1575/64(C), A.T.C. 58/51(CF) and A.T.C. 87/51(CF) -- not disallowed.
8476	11-19-84	Pacific Western Airlines Ltd.	- change of control of its parent company, Pacific Western Airlines Corporation, from the Government of the Province of Alberta to the general public, and consequently change of control of Pacific Western Airlines Ltd. - Licence Nos. A.T.C. 1851/69(S), A.T.C. 1831/68(S), A.T.C. 484/50(S), A.T.C. 1023/59(S), A.T.C. 2546/76(S), A.T.C. 1788/68(S), A.T.C. 3062/79(S), A.T.C. 3205/81(S), A.T.C. 576/51(NS), A.T.C. 2159/72(NS), A.T.C. 1787/68(NS), A.T.C. 669/53(C), A.T.C. 13/46(C), A.T.C. 766/55(C), A.T.C. 255/47(C), A.T.C. 1994/70(CF), A.T.C. 135/51(CF), A.T.C. 105/51(CF), A.T.C. 222/55(CF), A.T.C. 197/51(CF), A.T.C. 3681/84(C) and A.T.C. 854/84 (CF) -- not disallowed.

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
8478	11-16-84	Brooker - Wheaton Aviation Ltd.	- change of control from Donald Harold Wheaton and Beverly Whitmore Brooker to Donald Harold Wheaton and William A. Thompson - Licence Nos. A.T.C. 2285/73(C) and A.T.C. 581/77(CF) -- not disallowed.
8512	11-28-84	Nordair Ltée/ Nordair Ltd.	- change of control from Air Canada to Innocan Inc. - Licence Nos. A.T.C. 136/46(C), A.T.C. 171/51(CF), A.T.C. 937/58(C), A.T.C. 100/51(CF), A.T.C. 1711/67(C), A.T.C. 2844/78(S), A.T.C. 2185/72(NS), A.T.C. 987/59(NS), A.T.C. 1852/69(S), A.T.C. 3417/82(NS), A.T.C. 408/69(CF), A.T.C. 3719/84(CF) and A.T.C. 461/72(CF) -- not disallowed.
8524	12-06-84	Laurentide Aviation Limited	- change of control from Jack Scholefield, Donald Scholefield and Robert Scholefield to Jack Scholefield and Ann Scholefield - Licence Nos. A.T.C. 153/47(C) and 99/51(CF) -- not disallowed.
8530	12-07-84	Pacific Western Airlines Ltd. and Pacific Western (Alberta) Ltd.	- amalgamation of Pacific Western Airlines Ltd. (a company incorporated pursuant to the laws of the Province of British Columbia and to be renamed Pacific Western Airlines (B.C.) Ltd.) and Pacific Western (Alberta) Ltd. (a company incorporated pursuant to the laws of the Province of Alberta), with the amalgamated company to be named Pacific Western Airlines Ltd. -- not disallowed.
8836	05-01-85	Southern Frontier Air Transport Ltd. o/a Southern Frontier Airlines	- Change of control from Bengal Resources Ltd., MacLellan Holdings Ltd., Captain Investments Ltd. and Glenn Pickard to Time Air (1982) Ltd. - Licence Nos. A.T.C. 2812/78(C), A.T.C. 607/78(CF), A.T.C. 3313/81(NS), A.T.C. 3314/81(NS) and A.T.C. 3315/81(NS) -- not disallowed.

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
8919	06-07-85	Air Creebec Inc.	- change of control from the Cree Regional Authority acting through the Board of Compensation to the Compagnie des entreprises crie de développement économique (Cree Co.) (1984) Inc. - Licence Nos. A.T.C. 3379/82(NS), A.T.C. 3382/82(C), A.T.C. 778/82(CF) and A.T.C. 2176/72(C) -- not disallowed.
9065	08-06-85	Air Satellite Inc.	- change of control from Jean Fournier and Lucille Fournier to Gestion Jean Fournier Inc. - Licence Nos. A.T.C. 898/58(C), A.T.C. 353/64(CF), A.T.C. 2438/75(C), A.T.C. 525/75(CF), A.T.C. 2948/79(C), A.T.C. 3029/79(C), A.T.C. 669/79(CF), A.T.C. 3267/81(C), A.T.C. 738/81(CF), A.T.C. 2094/71(NS), A.T.C. 3302/81(NS), A.T.C. 1899/69(NS) and A.T.C. 3030/79(NS) -- not disallowed.
9107	23-08-85	Toronto Airways Limited o/a Torontair	- amalgamation of Toronto Airways Limited carrying on business under the firm name and style of Torontair with an affiliated corporation, Jonquil Limited, into a new corporation by the name of Toronto Airways Limited -- not disallowed.

Table A.12

ORDERS CONCERNING DECISIONS REPORTED IN THE AIR TRANSPORT
MONITOR OR CANCELLING UNIT TOLL OR CHARTER LICENCES
JANUARY 1, 1984 - SEPTEMBER 30, 1985

<u>Number</u>	<u>Date</u>	<u>Carrier</u>	<u>Application/Decision</u>
A-79	03-05-84	Trans North Turbo Air Limited o/a Trans North Air	- cancellation of Licence No. A.T.C. 691/80(CF).
A-115	03-28-84	North Coast Air Services Ltd.	- cancellation of Licence No. A.T.C. 3229/81(NS).
A-431	05-17-84	Northward Airlines Limited	- cancellation of Licence No. A.T.C. 2633/77(NS).
A-592	06-21-84	Canadian Pacific Air Lines Limited o/a CP Air	- cancellation of Licence No. A.T.C. 1262/61(S).
A-643	08-13-84	Jim Pattison Industries Ltd. o/a AirBC	- cancellation of Licence No. A.T.C. 1478/63(C).
A-723	09-19-84	Jim Pattison Industries Ltd. o/a AirBC	- cancellation of Order 1984- A-643 dated 08-13-84.
A-825	10-05-84	Airgava Ltd./ Airgava Ltée.	- cancellation of Licence Nos. 1411/62(C), A.T.C. 659/79(CF), A.T.C. 3031/79(NS) and A.T.C. 2927/79(NS).
A-837	10-19-84	Air Canada	- cancellation of Licence No. A.T.C. 2373/74(CF).
A-838	10-19-84	Air Canada	- cancellation of Licence No. A.T.C. 2375/74(CF).
A-839	10-19-84	Air Canada	- cancellation of Licence No. A.T.C. 2371/74(CF).
A-840	10-19-84	Air Canada	- cancellation of Licence No. A.T.C. 2374/74(CF).
A-875	11-07-84	Jim Pattison Industries Ltd. o/a Trans-Provincial Airlines Ltd.	- cancellation of Licence No. A.T.C. 2174/72(C).

<u>Number</u>	<u>Date</u>	<u>Carrier(s)</u>	<u>Application/Decision</u>
A-24	01-18-85	North Cariboo Flying Service Ltd.	- cancellation of Decision No. 8133 (dated 07-03-84) in respect of the point Grande Prairie, Alberta. By Decision 8133, Licence No. A.T.C. 3185/80(NS) was renewed and the suspension of the points Hudson's Hope, B.C. and Grande Prairie, Alberta, was maintained.
A-172	04-18-85	Air Satellite Inc.	- consolidation of Licence Nos. A.T.C. 2028/70(C) and A.T.C. 898/58(C) into one licence, namely Licence No. A.T.C. 898/58(C); - consolidation of Licence Nos. A.T.C. 485/73(CF) and A.T.C. 353/64(CF) into one Licence, namely Licence No. A.T.C. 353/64(CF); - cancellation of Licence Nos. 2028/70(C) and A.T.C. 485/73(CF).
A-362	05-03-85	Air Canada	- cancellation of Licence No. A.T.B. 446(CF).
A-1240	07-29-85	Meridian Aviation Ltd.	- cancellation of Licence Nos. A.T.C. 2239/73(C) and A.T.C. 541/75(CF).
A-1247	08-01-85	Yukon Air Service Limited	- cancellation of Licence No. A.T.C. 2204/72(NS).
A-1311	09-16-85	Powell Air Ltd.	- cancellation of Decision No. 8373 (dated 10-4-84) granting authority to serve the additional point Comox, B.C. under Licence No. A.T.C. 3237/81(NS).

The new Canadian air transport policy issued by the Minister of Transport, on May 10, 1984, proposed a relaxation of the air transport regulation in southern Canada⁴ in order to promote prosperity, innovation and competition in the industry. The policy asked the Air Transport Committee to give more weight to the benefits of increased competition in its evaluation of the requirements of public convenience and necessity (PCN) in relation to new licence applications for unit-toll services. The Committee was also asked to free new non-scheduled (charter) services from the PCN criteria. In the discussion that follows an attempt is made to examine the impact of the new policy on the Committee's decisions. Quotes from the decisions are used to illustrate the policy's influence.

Since May 10, 1984, the Committee's decisions on new domestic scheduled services have, on occasion, explicitly quoted the new policy as a justification for the approval of an application, as shown by the following:

"The Committee is also of the opinion that additional competition in the area would benefit the travelling public, as well as being consistent with the recommendations of the Committee's recent Interim Report on Domestic Charters and Air Fare Issues, and with the Government's New Canadian Air Policy Statement."
(Decision No. 8526)

Also, a similar quote was frequently used to justify decisions on new charter services. However, in July 1985, the Committee exempted, through a modification of its regulations, charter services from the PCN criteria as requested by the new policy.

When the Committee considers carriers' applications to amalgamate their scheduled services, it examines the applications in the context of the new policy. For example, the decision rendered November 16, 1984, concerning Pacific Western Airlines Ltd.'s application to amalgamate Licence Nos. A.T.C. 1788/68(S) and A.T.C. 3205/81(S) and to add the point Thunder Bay states:

"The Committee has considered in its deliberations the possibility that the increased competition for the Winnipeg - Thunder Bay -Toronto traffic could result in a reduction of Nordair's service to the community of Dryden. While the Committee cannot deny this is a possibility, the Committee sees this as a potential outcome of the less regulated, more competitive environment that is called for in the Committee's Interim Report and in the Government's new air policy. Indeed, an inevitable consequence of the increased emphasis on competition will be a closer matching of market demand and service. This will be intensified as existing carriers strive to become more efficient and cost conscious. The Committee is of the view that carriers and communities will have to develop a better mutual understanding of the opportunities and constraints this new environment brings, and that ultimately this will

lead to a more effective national air transportation system." (Decision No. 8477)

Furthermore, in a decision on the consolidation of certain Eastern Provincial Airways Ltd. licences the Committee stated "that the 'New Canadian Air Policy' implicitly gives greater weight to the decisions of the management of an air carrier in the operation of commercial air services". (Decision No. 8768)

The new air policy, in addition to giving more weight to competition in the PCN evaluation, also abolished all existing policies defining specific air carrier roles. The influence of this aspect of the new policy is illustrated in a decision on applications by two carriers to add points to existing licences:

"However, on May 10, 1984, the Honourable Lloyd Axworthy announced a 'New Canadian Air Policy' and this policy statement 'repeals all of these existing policies defining air carrier roles.' This statement effectively puts an end to any consideration of designated areas and, therefore, all Quebecair's discussions regarding Nordair's intrusion into the area assigned to it under the Regional Air Carrier Policy become null and void. The Committee is of the opinion that its study of the Quebecair and Nordair applications must now be based solely on the criteria of public convenience and necessity." (Decision No. 8369)

The new policy in order to promote competition also asked that all restrictions on unit toll licences of National, Regional and Local carriers serving markets in southern Canada be removed. Subsequently, the Governor-in-Council granted a number of Class 1, 2 and 3 carriers applications to delete aircraft restrictions from their licences. However, a number of competing carriers, who did not make application to the Governor-in-Council were left with restrictions on their licences. The Committee felt that the competing carriers should be on an equal footing. Therefore, on its own motion the Committee decided to remove the aircraft weight group restrictions from the licences of the competing carriers and this resulted in 21 decisions being issued on March 29, 1985.

The Committee also now refuses to continue to restrain carriers to the use of float equipped aircraft. It alleges that this procedure is no longer justified under the new Canadian air policy.

The decision of September 28, 1984 related to the application by Nordair to serve Dolbeau/St-Méthode (Québec) on a one year experimental basis under Licence No. A.T.C. 2185/72(NS), shows again the influence of the new policy on the decision process of the Committee:

"The Committee is of the opinion, however, that the public convenience and necessity requires that the licence not be granted for a one-year experimental period but on a permanent basis, because the new air policy

allows air carriers a greater latitude if they no longer wish to serve competitive routes." (Decision No. 8369)

In summary, the examination of the decisions rendered by the Committee since May 10, 1984, shows that the Committee ensures applications for scheduled services meet the test of public convenience and necessity, but in so doing gives more importance to the benefits of competition.

FOOTNOTES

¹ Definitions of classes of service are provided in the first two issues of Volume 1 of the Air Transport Monitor.

² Charter services (Class 4 licences) being in respect of point-to-point services are not affected.

³ Ideally, the points added (or deleted), in turn, should be examined in relation to the total area served by the licence they are added to (or deleted from).

⁴ For the new policy's purpose, the North is defined as Canada north of the 50th parallel from the Atlantic to the Ontario/Manitoba border, north of a diagonal line from that point to the intersection of the 55th parallel and the Manitoba/Saskatchewan border and north of the 55th parallel to the Pacific.

PART B

S E R V I C E S

This part of the report provides information on the level of air service provided at and between Canadian communities.

Tables B.1 through B.7 identify the number of flight departures and the number of departing seats on southern and northern domestic, transborder, and international services out of Canadian communities.

Tables B.8 through B.10 provide information on the convenience of service schedules between the eight largest hub airports in Canada.

Explanatory notes accompany each set of tables.

SUMMARY

The major changes that occurred with respect to the level of air service provided at and between Canadian communities are summarized below. The comparison is made either with the previous quarter or with the same quarter, one year before.

Service Changes

Scheduled service continued to expand in the third quarter as carriers increased capacity by 9% over the second quarter of 1985. While the introduction of summer peak schedules can explain much of this increase, seating capacity has grown by 12% over the corresponding week of 1984. Non-jet operators posted the largest increase, 36% over the previous year, but jet operations also grew at a healthy rate of 8%.

Seating capacity at most major hubs increased significantly over the previous year. Halifax and Ottawa registered the largest increases, growing by 30% and 29% respectively. Toronto (13%), Vancouver (11%), Winnipeg (10%), Montreal (9%), and Edmonton (6%) also showed substantial growth. Calgary's capacity remained substantially unchanged from a year earlier.

Southern Domestic Sector

Much of the expansion occurred in the southern domestic sector as seats grew by 8% over the second quarter of 1985 and by 12% over the third quarter of 1984.

Eastern Provincial Airways reorganized its network when it introduced its new summer schedule which resulted in an 18% increase in seats

over the previous year. The airline added Ottawa to its network by starting two daily round-trips from its Halifax base. The carrier also introduced weekend non-stops from Toronto to Charlottetown, Sydney, and St. John's. At the same time, the carrier reduced the operations of its subsidiary Air Maritimes and replaced much of this lost service with jet equipment.

Quebecair also posted an 18% increase in capacity. The Montréal based carrier accomplished this by replacing its BAC-1-11's with larger Boeing 737 equipment. However, frequencies remained at the same level as a year earlier. Quebec Aviation Ltée. inaugurated a thrice-weekly service linking La Malbaie to its Quebec City base.

Carriers were also active in the Northern Ontario market. Both Nordair and Air Ontario replaced Air Canada when it discontinued service on the Ottawa-Sudbury-Thunder Bay-Winnipeg route. Nordair's daily Boeing 737 flights marked the carrier's first service to Sudbury. Thunder Bay and Winnipeg were new points on Air Ontario's network. The carrier also added Windsor to its network by introducing two daily round-trips from its London base.

NorOntair expanded beyond Ontario's borders by inaugurating a Dryden-Minaki-Winnipeg Service. The carrier also introduced non-stop service between Sault Ste. Marie and Thunder Bay in competition with Nordair.

In Alberta, Time Air integrated its schedule with that of acquired Southern Frontier Airlines. The combined schedule showed first time service to Bonnyville, linking the northeastern Alberta city with Cold Lake and Edmonton.

Salmon Arm, B.C. also received its first scheduled services when a new carrier, Mountain Pacific Air of Vancouver, introduced four daily flights to Vancouver. Wilderness Airlines also inaugurated service to Dean River from its Bella Coola base.

Northern Domestic Sector

Most of the growth in the northern domestic sector was seasonal as scheduled carriers registered an 11% increase in capacity over the second quarter. Capacity increased only by 2% over the previous summer's level. The only new service was Bearskin Lake Air Service's new daily flight linking Red Lake to its Sioux Lookout base.

Transborder Sector

The transborder sector was more active as carriers increased seats by 8% over last spring. Transborder capacity ran 13% over the level of a year before. The most significant new services began under the Experimental Airports program. People Express expanded into Canada by introducing three daily round-trips between Mirabel and Newark. On the west coast, the former intra-state carrier AirCal inaugurated service between Vancouver and San Jose with two non-stop flights.

Transborder carriers also expanded service under the Local and Regional Notes added to the Canada-U.S. bilateral agreement. Empire Airlines introduced jet service on its three daily Montréal (Dorval) —Syracuse flights with Fokker F-28 equipment. Norcanair of Saskatoon expanded in the transborder sector by introducing a daily Regina-Minneapolis service and City Express of Toronto added three daily Hamilton-Pittsburgh round-trips.

Other carriers were also active. Air Canada moved its seasonal Calgary-New York service to Newark airport due to operating restrictions at La Guardia. South Pacific Island Airways ceased its Vancouver-Honolulu service. CP Air continued to serve the market and Continental Airlines replaced South Pacific Island Airways in the fall of 1985.

International Sector

The 20% increase in capacity registered in the summer reflected the seasonal nature of the international sector. However, capacity has increased by 9% over the previous year's level. Most noteworthy was Air Canada's new weekly Ottawa-London service, marking Ottawa's first intercontinental service. Air India ceased operations between Montréal and Toronto, and India. The carrier cited an equipment shortage as the reason for discontinuation of service.

SCHEDULED CARRIER ACTIVITY AT CANADIAN AIRPORTS: NOTES FOR TABLES B.1-B.7

The accompanying tables summarize scheduled carrier activity at Canadian airports by sector and equipment type during the week of August 15-21, 1985. Airport activity, as shown in Tables B.1 to B.4, is separated into four sectors: southern domestic, northern domestic, transborder and international. The northern domestic sector also includes flights between northern and southern Canada. A composite table aggregating activity in the four sectors is provided in Table B.5. A comparison of total airport activity by sector and equipment type (Table B.6) is made between 1985 and the corresponding week of 1984. The last table in this series (Table B.7) summarizes airport activity by province, sector, and equipment type for the week of August 15-21, 1985.

Flight Selection

The tables include all scheduled departures listed in the Official Airline Guide. This listing reports intended scheduled operations which, it is cautioned, may differ from actual results. Moreover, it is pointed out that because of licence restrictions related to the carriage of local traffic on certain flights and because of the routing of flights and the itineraries of passengers, not all the capacity (seats) may be available for departing passengers out of the individual airports.

Charter, all-cargo, and other flights not listed in the Official Airline Guide are not reported in the tables.

Capacities

The accompanying tables separate jet and non-jet operations. Within these two groups of aircraft, a standard seating capacity, measured by available seats, is assigned to each aircraft type in a carrier's fleet.

In some cases, the use of the standard seating capacity only approximates actual seat volumes; for example, where:

- a) a particular carrier configures one aircraft as all-economy and another aircraft of the same type as seating both first class and economy passengers. In such cases, the most common seat configuration employed by the carrier is used.
- b) seating capacity varies depending upon the specific model of an aircraft. Where the different models could not be distinguished, an average figure is used, weighted by the number of each model within an airline's fleet.
- c) operations, as in northern Canada, involve the use of part of the passenger cabin for cargo. The seating

capacity in such cases has been adjusted where necessary.

The dividing line separating the southern domestic and northern domestic sectors is defined by the Air Carrier Regulations as being:

- a) the 50th parallel between the Atlantic coast of Canada and the border of Ontario and Manitoba;
- b) a diagonal line drawn from the intersection of the 50th parallel with the border of Ontario and Manitoba to the intersection of the 53rd parallel with the border of Manitoba and Saskatchewan;
- c) a diagonal line drawn from the intersection of the 53rd parallel with the border of Manitoba and Saskatchewan to the intersection of the 55th parallel with the border of Saskatchewan and Alberta; and
- d) a line drawn from the intersection of the 55th parallel with the border of Saskatchewan and Alberta along the 55th parallel to the Pacific coast of Canada.

Domestic flights which have the departure and/or the arrival airport in northern Canada are included in the northern domestic sector. This sector thus includes flights between northern Canada and southern Canada, as well as flights entirely within northern Canada. Domestic flights which have both the departure and arrival airports in southern Canada are assigned to the southern domestic sector. Domestic portions of transborder and international flights are not included in either domestic sector.

The transborder sector includes all flights operated between Canada and the United States by a Canadian or American carrier. The transborder sector also includes domestic portions operated by:

- a) American carriers, and
- b) Canadian carriers where no local traffic is permitted (because of customs procedures) and the flight begins or ends in the United States.

The international sector includes all flights between Canada and countries other than the United States. The international sector also includes:

- a) domestic and transborder portions of flights operated by foreign carriers, and
- b) domestic portions of Canadian carrier flights which begin or end in a foreign country. These flight portions may have local traffic restrictions and, if not, carry little domestic traffic.

Table B.1
SCHEDULED CARRIER ACTIVITY
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Anahim Lake, B.C.	0	0	24	168	24	168
Atikokan, Ont.	0	0	24	480	24	480
Baie-Comeau, Qué.	16	1904	33	198	49	2102
Bella Coola, B.C.	0	0	19	154	19	154
Bonaventure, Qué.	0	0	7	105	7	105
Bonnyville, Alta.	0	0	10	150	10	150
Brandon, Man.	12	1428	0	0	12	1428
Brockville, Ont.	0	0	20	300	20	300
Calgary, Alta.	452	60668	83	4033	535	64701
Campbell River, B.C.	18	2142	51	2047	69	4189
Castlegar, B.C.	12	1428	7	338	19	1766
Chapleau, Ont.	0	0	7	140	7	140
Charlo, N.B.	6	714	0	0	6	714
Charlottetown, P.E.I.	29	3393	12	480	41	3873
Chatham, N.B.	6	714	0	0	6	714
Chibougamau, Qué.	0	0	6	252	6	252
Cochrane, Ont.	0	0	13	92	13	92
Cold Lake, Alta.	0	0	21	645	21	645
Comox, B.C.	6	714	36	1740	42	2454
Cranbrook, B.C.	36	4284	0	0	36	4284
Dauphin, Man.	0	0	15	135	15	135
Dean River, B.C.	0	0	7	70	7	70
Deer Lake, Nfld.	20	2380	0	0	20	2380
Delta, B.C.	0	0	48	288	48	288
Dolbeau, Qué.	0	0	12	504	12	504
Dryden, Ont.	26	3094	23	460	49	3554
Earlton, Ont.	0	0	24	480	24	480
Edmonton (International), Alta.	179	25221	0	0	179	25221
Edmonton (Municipal), Alta.	115	13515	49	1716	164	15231
Elliot Lake, Ont.	0	0	28	495	28	495
Fort Frances, Ont.	0	0	19	380	19	380
Fredericton, N.B.	34	3706	14	560	48	4266
Gander, Nfld.	46	5565	0	0	46	5565
Gaspé, Qué.	0	0	24	960	24	960
Gatineau/Hull, Qué.	0	0	16	240	16	240
Geraldton, Ont.	0	0	17	340	17	340
Gillies Bay, B.C.	0	0	19	342	19	342
Halifax, N.S.	277	34983	70	2800	347	37783
Hamilton, Ont.	0	0	12	504	12	504
Hornepayne, Ont.	0	0	12	240	12	240
Iles-de-la-Madeleine, Qué.	0	0	21	856	21	856
Kamloops, B.C.	32	3808	12	240	44	4048
Kapuskasing, Ont.	0	0	22	660	22	660
Kelowna, B.C.	93	11067	26	940	119	12007
Kenora, Ont.	0	0	29	495	29	495
Kingston, Ont.	0	0	32	480	32	480
Kirkland Lake, Ont.	0	0	12	240	12	240
La Malbaie, Qué.	0	0	3	21	3	21

capacity in such cases has been adjusted where necessary.

The dividing line separating the southern domestic and northern domestic sectors is defined by the Air Carrier Regulations as being:

- a) the 50th parallel between the Atlantic coast of Canada and the border of Ontario and Manitoba;
- b) a diagonal line drawn from the intersection of the 50th parallel with the border of Ontario and Manitoba to the intersection of the 53rd parallel with the border of Manitoba and Saskatchewan;
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- a) American carriers, and
- b) Canadian carriers where no local traffic is permitted (because of customs procedures) and the flight begins or ends in the United States.

The international sector includes all flights between Canada and countries other than the United States. The international sector also includes:

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Table B.1
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Bonaventure, Qué.	0	0	7	105	7	105
Bonnyville, Alta.	0	0	10	150	10	150
Brandon, Man.	12	1428	0	0	12	1428
Brockville, Ont.	0	0	20	300	20	300
Calgary, Alta.	452	60668	83	4033	535	64701
Campbell River, B.C.	18	2142	51	2047	69	4189
Castlegar, B.C.	12	1428	7	338	19	1766
Chapleau, Ont.	0	0	7	140	7	140
Charlo, N.B.	6	714	0	0	6	714
Charlottetown, P.E.I.	29	3393	12	480	41	3873
Chatham, N.B.	6	714	0	0	6	714
Chibougamau, Qué.	0	0	6	252	6	252
Cochrane, Ont.	0	0	13	92	13	92
Cold Lake, Alta.	0	0	21	645	21	645
Comox, B.C.	6	714	36	1740	42	2454
Cranbrook, B.C.	36	4284	0	0	36	4284
Dauphin, Man.	0	0	15	135	15	135
Dean River, B.C.	0	0	7	70	7	70
Deer Lake, Nfld.	20	2380	0	0	20	2380
Delta, B.C.	0	0	48	288	48	288
Dolbeau, Qué.	0	0	12	504	12	504
Dryden, Ont.	26	3094	23	460	49	3554
Earlton, Ont.	0	0	24	480	24	480
Edmonton (International), Alta.	179	25221	0	0	179	25221
Edmonton (Municipal), Alta.	115	13515	49	1716	164	15231
Elliot Lake, Ont.	0	0	28	495	28	495
Fort Frances, Ont.	0	0	19	380	19	380
Fredericton, N.B.	34	3706	14	560	48	4266
Gander, Nfld.	46	5565	0	0	46	5565
Gaspé, Qué.	0	0	24	960	24	960
Gatineau/Hull, Qué.	0	0	16	240	16	240
Geraldton, Ont.	0	0	17	340	17	340
Gillies Bay, B.C.	0	0	19	342	19	342
Halifax, N.S.	277	34983	70	2800	347	37783
Hamilton, Ont.	0	0	12	504	12	504
Hornepayne, Ont.	0	0	12	240	12	240
Iles-de-la-Madeleine, Qué.	0	0	21	856	21	856
Kamloops, B.C.	32	3808	12	240	44	4048
Kapuskasing, Ont.	0	0	22	660	22	660
Kelowna, B.C.	93	11067	26	940	119	12007
Kenora, Ont.	0	0	29	495	29	495
Kingston, Ont.	0	0	32	480	32	480
Kirkland Lake, Ont.	0	0	12	240	12	240
La Malbaie, Qué.	0	0	3	21	3	21

Table B.1 (cont.)
SCHEDULED CARRIER ACTIVITY
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Lethbridge, Alta.	0	0	52	2570	52	2570
Lloydminster, Alta.	0	0	53	1620	53	1620
London, Ont.	14	1428	97	4850	111	6278
Manitouwadge, Ont.	0	0	34	379	34	379
Marathon, Ont.	0	0	44	614	44	614
Masset, B.C.	0	0	12	120	12	120
Matagami, Qué.	0	0	6	240	6	240
Matane, Qué.	0	0	5	30	5	30
Medicine Hat, Alta.	0	0	25	1224	25	1224
Minaki, Ont.	0	0	8	160	8	160
Moncton, N.B.	28	2856	28	1120	56	3976
Mont-Joli, Qué.	16	1904	31	825	47	2729
Montréal (Dorval), Qué.	501	63092	57	2346	558	65438
Montréal (Mirabel), Qué.	0	0	14	560	14	560
Nanaimo Harbour, B.C.	0	0	15	300	15	300
Nanaimo, B.C.	0	0	117	2236	117	2236
North Battleford, Sask.	0	0	22	330	22	330
North Bay, Ont.	38	4116	57	1376	95	5492
Ottawa, Ont./Hull, Qué.	293	36213	176	6985	469	43198
Parry Sound, Ont.	0	0	3	30	3	30
Pembroke, Ont.	0	0	28	196	28	196
Penticton, B.C.	37	4403	6	120	43	4523
Peterborough, Ont.	0	0	11	253	11	253
Port Hardy, B.C.	8	952	19	950	27	1902
Powell River, B.C.	0	0	51	1792	51	1792
Prince Albert, Sask.	0	0	12	484	12	484
Prince George, B.C.	39	4431	6	120	45	4551
Prince Rupert, B.C.	14	1526	21	210	35	1736
Qualicum, B.C.	0	0	35	245	35	245
Québec, Qué.	103	11826	39	561	142	12387
Quesnel, B.C.	6	714	24	840	30	1554
Regina, Sask.	93	11438	17	599	110	12037
Rimouski, Qué.	0	0	20	120	20	120
Rouyn/Noranda, Qué.	19	2040	3	69	22	2109
Saguenay/Bagotville, Qué.	18	2142	10	150	28	2292
Saint John, N.B.	47	4998	20	800	67	5798
Salmon Arm, B.C.	0	0	26	390	26	390
Sandspit, B.C.	7	833	9	90	16	923
Sans Souci Island, Ont.	0	0	3	30	3	30
Sarnia, Ont.	0	0	24	1200	24	1200
Saskatoon, Sask.	85	10219	57	1899	142	12118
Sault Ste. Marie, Ont.	46	5270	30	720	76	5990
Sechelt, B.C.	0	0	19	342	19	342
Smithers, B.C.	7	833	0	0	7	833
St. John's, Nfld.	82	10417	0	0	82	10417
Stephenville, Nfld.	27	3395	0	0	27	3395
Sudbury, Ont.	31	3400	91	2955	122	6355
Sydney/Glace Bay, N.S.	48	5650	0	0	48	5650

Table B.1 (cont.)
SCHEDULED CARRIER ACTIVITY
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seas	Dep.	Seats
Terrace Bay, Ont.	0	0	12	240	12	240
Terrace/Kitimat, B.C.	26	2954	0	0	26	2954
Thunder Bay, Ont.	91	10656	75	2057	166	12713
Timmins, Ont.	19	2058	76	1702	95	3760
Toronto (Buttonville), Ont.	0	0	23	345	23	345
Toronto (Island), Ont.	0	0	58	2900	58	2900
Toronto (Pearson Int'l), Ont.	919	127750	216	6499	1135	134249
Trenton/Belleville, Ont.	0	0	29	435	29	435
Val d'Or, Qué.	30	3034	9	309	39	3343
Vancouver Harbour, B.C.	0	0	86	1720	86	1720
Vancouver, B.C.	507	67030	575	15844	1082	82874
Victoria Harbour, B.C.	0	0	71	1420	71	1420
Victoria, B.C.	43	4968	251	8052	294	13020
Wawa, Ont.	0	0	19	380	19	380
Williams Lake, B.C.	8	952	24	840	32	1792
Windsor, Ont.	54	5930	13	623	67	6553
Winnipeg, Man.	273	32109	32	860	305	32969
Yarmouth, N.S.	7	714	0	0	7	714
Yorkton, Sask.	0	0	5	45	5	45
Total	4999	632979	3950	113089	8949	746068

Table B.2
SCHEDULED CARRIER ACTIVITY
NORTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Aklavik, N.W.T.	0	0	10	150	10	150
Alice Arm/Kitsault, B.C.	0	0	3	30	3	30
Artic Bay, N.W.T.	0	0	1	20	1	20
Attawapiskat, Ont.	0	0	11	284	11	284
Baie-Comeau, Qué.	0	0	10	60	10	60
Baie-Johan-Beetz, Que.	0	0	3	30	3	30
Baker Lake, N.W.T.	0	0	9	300	9	300
Berens River, Man.	0	0	7	63	7	63
Big Trout Lake, Ont.	0	0	15	198	15	198
Blanc-Sablon, Qué.	0	0	5	200	5	200
Broughton Island, N.W.T.	0	0	4	160	4	160
Cambridge Bay, N.W.T.	2	112	8	217	10	329
Cape Dorset, N.W.T.	0	0	3	120	3	120
Chesterfield Inlet, N.W.T.	0	0	2	40	2	40
Chetwynd, B.C.	0	0	12	180	12	180
Chevery, Qué.	0	0	30	600	30	600
Churchill Falls, Nfld.	2	238	0	0	2	238
Churchill, Man.	4	476	10	380	14	856
Clyde River, N.W.T.	0	0	4	160	4	160
Cochrane, Ont.	0	0	10	74	10	74
Coppermine, N.W.T.	0	0	7	204	7	204
Coral Harbour, N.W.T.	0	0	3	120	3	120
Cross Lake, Man.	0	0	6	156	6	156
Dawson City, Y.T.	0	0	20	211	20	211
Dawson Creek, B.C.	12	1428	12	180	24	1608
Deer Lake, Nfld.	6	714	0	0	6	714
Eastmain River, Qué.	0	0	12	240	12	240
Edmonton (International), Alta.	43	4503	0	0	43	4503
Edmonton (Municipal), Alta.	13	1547	47	2280	60	3827
Eskimo Point, N.W.T.	0	0	9	320	9	320
Flin Flon, Man.	7	833	0	0	7	833
Fort Albany, Ont.	0	0	14	520	14	520
Fort Chipewyan, Alta.	0	0	5	240	5	240
Fort George, Qué.	0	0	9	180	9	180
Fort Hope, Ont.	0	0	10	200	10	200
Fort McMurray, Alta.	13	1547	12	576	25	2123
Fort McPherson, N.W.T.	0	0	10	150	10	150
Fort Nelson, B.C.	11	1199	2	28	13	1227
Fort Severn, Ont.	0	0	5	30	5	30
Fort Simpson, N.W.T.	1	119	10	164	11	283
Fort Smith, N.W.T.	12	1428	2	52	14	1480
Fort St. John, B.C.	41	4469	6	90	47	4559
Geraldton, Ont.	0	0	5	100	5	100
Gethsémani, Qué.	0	0	10	100	10	100
Gillam, Man.	8	952	0	0	8	952
Gjoa Haven, N.W.T.	0	0	8	112	8	112
Gods Lake Narrows, Man.	0	0	3	78	3	78
Gods River, Man.	0	0	3	78	3	78

Table B.2 (cont.)
SCHEDULED CARRIER ACTIVITY
NORTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Goose Bay, Nfld.	10	1001	0	0	10	1001
Grande Prairie, Alta.	15	1635	18	888	33	2523
Grise Fiord, N.W.T.	0	0	1	20	1	20
Hall Beach, N.W.T.	2	112	7	134	9	246
Havre-St.-Pierre, Qué.	0	0	15	510	15	510
Hay River, N.W.T.	12	1428	4	104	16	1532
High Level, Alta.	0	0	11	528	11	528
Holman Island, N.W.T.	0	0	3	43	3	43
Igloolik, N.W.T.	0	0	6	120	6	120
Inuvik, N.W.T.	13	1169	45	715	58	1884
Iqaluit (Frobisher Bay), N.W.T.	14	784	12	458	26	1242
Island Lake, Man.	0	0	12	278	12	278
Kasabonika, Ont.	0	0	6	90	6	90
Kashechewan, Ont.	0	0	14	520	14	520
Kégashka, Qué.	0	0	10	100	10	100
Kenora, Ont.	0	0	23	405	23	405
Kuujuaq (Fort Chimo), Qué.	11	616	0	0	11	616
Kuujuarapik (Poste-Baleine), Qué	5	280	3	60	8	340
La Grande, Qué.	10	560	0	0	10	560
La Ronge, Sask.	0	0	17	750	17	750
La Tabatière, Qué.	0	0	10	100	10	100
Lake Harbour, N.W.T.	0	0	2	40	2	40
Lansdowne House, Ont.	0	0	10	200	10	200
Little Grand Rapids, Man.	0	0	3	27	3	27
Lynn Lake, Man.	3	357	0	0	3	357
Matagami, Qué.	0	0	6	120	6	120
Mayo, Y.T.	0	0	17	193	17	193
Mont-Joli, Qué.	0	0	7	280	7	280
Montréal (Dorval), Qué.	14	1225	0	0	14	1225
Moosonee, Ont.	0	0	31	706	31	706
Nanisivik, N.W.T.	2	112	2	40	4	152
Natashquan, Qué.	0	0	16	490	16	490
Norman Wells, N.W.T.	20	1939	2	28	22	1967
Norway House, Man.	0	0	13	338	13	338
Old Crow, Y.T.	0	0	8	152	8	152
Ottawa, Ont./Hull, Qué.	1	56	0	0	1	56
Oxford House, Man.	0	0	3	78	3	78
Pangnirtung, N.W.T.	0	0	6	240	6	240
Paulatuk, N.W.T.	0	0	4	60	4	60
Peace River, Alta.	0	0	21	1008	21	1008
Pelly Bay (Town Site), N.W.T.	0	0	2	40	2	40
Pelly Bay, N.W.T.	0	0	3	42	3	42
Pickle Lake, Ont.	0	0	4	80	4	80
Pine Point, N.W.T.	0	0	4	104	4	104
Pond Inlet, N.W.T.	0	0	5	140	5	140
Port-Menier, Qué.	0	0	6	240	6	240
Prince Albert, Sask.	0	0	5	210	5	210
Prince George, B.C.	17	1913	6	90	23	2003

Table B.2 (cont.)
SCHEDULED CARRIER ACTIVITY
NORTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Prince Rupert, B.C.	0	0	6	60	6	60
Québec, Qué.	20	2215	0	0	20	2215
Rainbow Lake, Alta.	0	0	5	240	5	240
Rankin Inlet, N.W.T.	0	0	23	903	23	903
Red Lake, Ont.	0	0	25	393	25	393
Red Sucker Lake, Man.	0	0	3	78	3	78
Repulse Bay, N.W.T.	0	0	3	100	3	100
Resolute Bay, N.W.T.	4	224	2	40	6	264
Round Lake, Ont.	0	0	6	90	6	90
Rupert House, Qué.	0	0	18	360	18	360
Sachs Harbour, N.W.T.	0	0	4	60	4	60
Saguenay/Bagotville, Qué.	0	0	2	30	2	30
Sandy Lake, Ont.	0	0	6	90	6	90
Saskatoon, Sask.	0	0	4	186	4	186
Schefferville, Qué.	7	833	2	30	9	863
Sept-Iles, Qué.	38	4420	31	850	69	5270
Sioux Lookout, Ont.	0	0	40	600	40	600
Spence Bay, N.W.T.	0	0	6	84	6	84
St. Theresa Point, Man.	0	0	12	278	12	278
St.-Augustin, Qué.	0	0	5	50	5	50
Stephenville, Nfld.	3	357	0	0	3	357
Stewart, B.C.	0	0	3	30	3	30
Stony Rapids, Sask.	0	0	8	354	8	354
Tête-à-la-Baleine, Qué.	0	0	10	100	10	100
The Pas, Man.	6	714	0	0	6	714
Thompson, Man.	12	1428	1	40	13	1468
Thunder Bay, Ont.	0	0	15	245	15	245
Timmins, Ont.	0	0	6	240	6	240
Tuktoyaktuk, N.W.T.	0	0	20	300	20	300
Uranium City, Sask.	0	0	2	84	2	84
Val d'Or, Qué.	6	336	0	0	6	336
Vancouver, B.C.	12	1308	0	0	12	1308
Wabush/Labrador City, Nfld.	14	1666	2	30	16	1696
Watson Lake, Y.T.	5	545	3	18	8	563
Webequie, Ont.	0	0	5	100	5	100
Wemindji, Qué.	0	0	12	240	12	240
Whale Cove, N.W.T.	0	0	2	40	2	40
Whitehorse, Y.T.	15	1655	26	286	41	1941
Winiak, Ont.	0	0	4	24	4	24
Winnipeg, Man.	19	2261	40	901	59	3162
Wollaston Lake, Sask.	0	0	2	84	2	84
Wrigley, N.W.T.	0	0	4	56	4	56
Yellowknife, N.W.T.	37	3521	17	623	54	4144

Table B.2 (cont.)
SCHEDULED CARRIER ACTIVITY
NORTHERN DOMESTIC SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Total	522	54235	1175	28761	1697	82996

Table B.3
SCHEDULED CARRIER ACTIVITY
TRANSBORDER SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Calgary, Alta.	158	19603	8	159	166	19762
Edmonton (International), Alta.	69	8674	0	0	69	8674
Halifax, N.S.	7	714	0	0	7	714
Hamilton, Ont.	0	0	15	345	15	345
Kingston, Ont.	0	0	5	75	5	75
London, Ont.	0	0	10	500	10	500
Montréal (Dorval), Qué.	259	32959	28	636	287	33595
Montréal (Mirabel), Qué.	23	4123	0	0	23	4123
Ottawa, Ont./Hull, Qué.	50	4756	17	690	67	5446
Prince Rupert, B.C.	0	0	6	60	6	60
Québec, Qué.	2	238	0	0	2	238
Regina, Sask.	14	1484	14	672	28	2156
Saint John, N.B.	7	714	0	0	7	714
Saskatoon, Sask.	7	742	0	0	7	742
Thunder Bay, Ont.	0	0	12	180	12	180
Toronto (Pearson Int'l), Ont.	558	77867	128	3725	686	81592
Vancouver, B.C.	159	21338	31	433	190	21771
Victoria, B.C.	0	0	59	1201	59	1201
Whitehorse, Y.T.	0	0	7	133	7	133
Winnipeg, Man.	42	4886	0	0	42	4886
Yarmouth, N.S.	7	714	0	0	7	714
Total	1362	178812	340	8809	1702	187621

Table B.4
SCHEDULED CARRIER ACTIVITY
INTERNATIONAL SECTOR
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Calgary, Alta.	29	8000	0	0	29	8000
Edmonton (International), Alta.	20	5792	0	0	20	5792
Gander, Nfld.	6	1380	0	0	6	1380
Halifax, N.S.	11	2858	7	280	18	3138
Iqaluit (Frobisher Bay), N.W.T.	0	0	1	40	1	40
Montréal (Mirabel), Qué.	142	47468	0	0	142	47468
Ottawa, Ont./Hull, Qué.	2	576	0	0	2	576
Québec, Qué.	2	858	0	0	2	858
Toronto (Pearson Int'l), Ont.	122	36529	0	0	122	36529
Vancouver, B.C.	50	17272	0	0	50	17272
Winnipeg, Man.	4	1228	0	0	4	1228
Total	388	121961	8	320	396	122281

Table B.5
SCHEDULED CARRIER ACTIVITY
ALL SECTORS
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Aklavik, N.W.T.	0	0	10	150	10	150
Alice Arm/Kitsault, B.C.	0	0	3	30	3	30
Anahim Lake, B.C.	0	0	24	168	24	168
Arctic Bay, N.W.T.	0	0	1	20	1	20
Atikokan, Ont.	0	0	24	480	24	480
Attawapiskat, Ont.	0	0	11	284	11	284
Baie-Comeau, Qué.	16	1904	43	258	59	2162
Baie-Johan-Beetz, Que.	0	0	3	30	3	30
Baker Lake, N.W.T.	0	0	9	300	9	300
Bella Coola, B.C.	0	0	19	154	19	154
Berens River, Man.	0	0	7	63	7	63
Big Trout Lake, Ont.	0	0	15	198	15	198
Blanc-Sablon, Qué.	0	0	5	200	5	200
Bonaventure, Qué.	0	0	7	105	7	105
Bonnyville, Alta.	0	0	10	150	10	150
Brandon, Man.	12	1428	0	0	12	1428
Brockville, Ont.	0	0	20	300	20	300
Broughton Island, N.W.T.	0	0	4	160	4	160
Calgary, Alta.	639	88271	91	4192	730	92463
Cambridge Bay, N.W.T.	2	112	8	217	10	329
Campbell River, B.C.	18	2142	51	2047	69	4189
Cape Dorset, N.W.T.	0	0	3	120	3	120
Castlegar, B.C.	12	1428	7	338	19	1766
Chapleau, Ont.	0	0	7	140	7	140
Charlo, N.B.	6	714	0	0	6	714
Charlottetown, P.E.I.	29	3393	12	480	41	3873
Chatham, N.B.	6	714	0	0	6	714
Chesterfield Inlet, N.W.T.	0	0	2	40	2	40
Chetwynd, B.C.	0	0	12	180	12	180
Chevery, Qué.	0	0	30	600	30	600
Chibougamau, Qué.	0	0	6	252	6	252
Churchill Falls, Nfld.	2	238	0	0	2	238
Churchill, Man.	4	476	10	380	14	856
Clyde River, N.W.T.	0	0	4	160	4	160
Cochrane, Ont.	0	0	23	166	23	166
Cold Lake, Alta.	0	0	21	645	21	645
Comox, B.C.	6	714	36	1740	42	2454
Coppermine, N.W.T.	0	0	7	204	7	204
Coral Harbour, N.W.T.	0	0	3	120	3	120
Cranbrook, B.C.	36	4284	0	0	36	4284
Cross Lake, Man.	0	0	6	156	6	156
Dauphin, Man.	0	0	15	135	15	135
Dawson City, Y.T.	0	0	20	211	20	211
Dawson Creek, B.C.	12	1428	12	180	24	1608
Dean River, B.C.	0	0	7	70	7	70
Deer Lake, Nfld.	26	3094	0	0	26	3094
Delta, B.C.	0	0	48	288	48	288
Dolbeau, Qué.	0	0	12	504	12	504

Table B.5 (cont.)
SCHEDULED CARRIER ACTIVITY
ALL SECTORS
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Dryden, Ont.	26	3094	23	460	49	3554
Earlton, Ont.	0	0	24	480	24	480
Eastmain River, Qué.	0	0	12	240	12	240
Edmonton (International), Alta.	311	44190	0	0	311	44190
Edmonton (Municipal), Alta.	128	15062	96	3996	224	19058
Elliot Lake, Ont.	0	0	28	495	28	495
Eskimo Point, N.W.T.	0	0	9	320	9	320
Flin Flon, Man.	7	833	0	0	7	833
Fort Albany, Ont.	0	0	14	520	14	520
Fort Chipewyan, Alta.	0	0	5	240	5	240
Fort Frances, Ont.	0	0	19	380	19	380
Fort George, Qué.	0	0	9	180	9	180
Fort Hope, Ont.	0	0	10	200	10	200
Fort McMurray, Alta.	13	1547	12	576	25	2123
Fort McPherson, N.W.T.	0	0	10	150	10	150
Fort Nelson, B.C.	11	1199	2	28	13	1227
Fort Severn, Ont.	0	0	5	30	5	30
Fort Simpson, N.W.T.	1	119	10	164	11	283
Fort Smith, N.W.T.	12	1428	2	52	14	1480
Fort St. John, B.C.	41	4469	6	90	47	4559
Fredericton, N.B.	34	3706	14	560	48	4266
Gander, Nfld.	52	6945	0	0	52	6945
Gaspé, Qué.	0	0	24	960	24	960
Gatineau/Hull, Qué.	0	0	16	240	16	240
Geraldton, Ont.	0	0	22	440	22	440
Gethsémani, Qué.	0	0	10	100	10	100
Gillam, Man.	8	952	0	0	8	952
Gillies Bay, B.C.	0	0	19	342	19	342
Gjoa Haven, N.W.T.	0	0	8	112	8	112
Gods Lake Narrows, Man.	0	0	3	78	3	78
Gods River, Man.	0	0	3	78	3	78
Goose Bay, Nfld.	10	1001	0	0	10	1001
Grande Prairie, Alta.	15	1635	18	888	33	2523
Grise Fiord, N.W.T.	0	0	1	20	1	20
Halifax, N.S.	295	38555	77	3080	372	41635
Hall Beach, N.W.T.	2	112	7	134	9	246
Hamilton, Ont.	0	0	27	849	27	849
Havre-St.-Pierre, Qué.	0	0	15	510	15	510
Hay River, N.W.T.	12	1428	4	104	16	1532
High Level, Alta.	0	0	11	528	11	528
Holman Island, N.W.T.	0	0	3	43	3	43
Hornepayne, Ont.	0	0	12	240	12	240
Igloolik, N.W.T.	0	0	6	120	6	120
Iles-de-la-Madeleine, Qué.	0	0	21	856	21	856
Inuvik, N.W.T.	13	1169	45	715	58	1884
Iqaluit (Frobisher Bay), N.W.T.	14	784	13	498	27	1282
Island Lake, Man.	0	0	12	278	12	278
Kamloops, B.C.	32	3808	12	240	44	4048

Table B.5 (cont.)
SCHEDULED CARRIER ACTIVITY
ALL SECTORS
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Kapuskasing, Ont.	0	0	22	660	22	660
Kasabonika, Ont.	0	0	6	90	6	90
Kashechewan, Ont.	0	0	14	520	14	520
Kégashka, Qué.	0	0	10	100	10	100
Kelowna, B.C.	93	11067	26	940	119	12007
Kenora, Ont.	0	0	52	900	52	900
Kingston, Ont.	0	0	37	555	37	555
Kirkland Lake, Ont.	0	0	12	240	12	240
Kuujuuaq (Fort Chimo), Qué.	11	616	0	0	11	616
Kuujuarapik (Poste-Baleine), Qué	5	280	3	60	8	340
La Grande, Qué.	10	560	0	0	10	560
La Malbaie, Qué.	0	0	3	21	3	21
La Ronge, Sask.	0	0	17	750	17	750
La Tabatière, Qué.	0	0	10	100	10	100
Lake Harbour, N.W.T.	0	0	2	40	2	40
Lansdowne House, Ont.	0	0	10	200	10	200
Lethbridge, Alta.	0	0	52	2570	52	2570
Little Grand Rapids, Man.	0	0	3	27	3	27
Lloydminster, Alta.	0	0	53	1620	53	1620
London, Ont.	14	1428	107	5350	121	6778
Lynn Lake, Man.	3	357	0	0	3	357
Manitouwadge, Ont.	0	0	34	379	34	379
Marathon, Ont.	0	0	44	614	44	614
Masset, B.C.	0	0	12	120	12	120
Matagami, Qué.	0	0	12	360	12	360
Matane, Qué.	0	0	5	30	5	30
Mayo, Y.T.	0	0	17	193	17	193
Medicine Hat, Alta.	0	0	25	1224	25	1224
Minaki, Ont.	0	0	8	160	8	160
Moncton, N.B.	28	2856	28	1120	56	3976
Mont-Joli, Qué.	16	1904	38	1105	54	3009
Montréal (Dorval), Qué.	774	97276	85	2982	859	100258
Montréal (Mirabel), Qué.	165	51591	14	560	179	52151
Moosonee, Ont.	0	0	31	706	31	706
Nanaimo Harbour, B.C.	0	0	15	300	15	300
Nanaimo, B.C.	0	0	117	2236	117	2236
Nanisivik, N.W.T.	2	112	2	40	4	152
Natashquan, Qué.	0	0	16	490	16	490
Norman Wells, N.W.T.	20	1939	2	28	22	1967
North Battleford, Sask.	0	0	22	330	22	330
North Bay, Ont.	38	4116	57	1376	95	5492
Norway House, Man.	0	0	13	338	13	338
Old Crow, Y.T.	0	0	8	152	8	152
Ottawa, Ont./Hull, Qué.	346	41601	193	7675	539	49276
Oxford House, Man.	0	0	3	78	3	78
Pangnirtung, N.W.T.	0	0	6	240	6	240
Parry Sound, Ont.	0	0	3	30	3	30
Paulatuk, N.W.T.	0	0	4	60	4	60

Table B.5 (cont.)
SCHEDULED CARRIER ACTIVITY
ALL SECTORS
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Peace River, Alta.	0	0	21	1008	21	1008
Pelly Bay (Town Site), N.W.T.	0	0	2	40	2	40
Pelly Bay, N.W.T.	0	0	3	42	3	42
Pembroke, Ont.	0	0	28	196	28	196
Penticton, B.C.	37	4403	6	120	43	4523
Peterborough, Ont.	0	0	11	253	11	253
Pickle Lake, Ont.	0	0	4	80	4	80
Pine Point, N.W.T.	0	0	4	104	4	104
Pond Inlet, N.W.T.	0	0	5	140	5	140
Port Hardy, B.C.	8	952	19	950	27	1902
Port-Menier, Qué.	0	0	6	240	6	240
Powell River, B.C.	0	0	51	1792	51	1792
Prince Albert, Sask.	0	0	17	694	17	694
Prince George, B.C.	56	6344	12	210	68	6554
Prince Rupert, B.C.	14	1526	33	330	47	1856
Qualicum, B.C.	0	0	35	245	35	245
Québec, Qué.	127	15137	39	561	166	15698
Quesnel, B.C.	6	714	24	840	30	1554
Rainbow Lake, Alta.	0	0	5	240	5	240
Rankin Inlet, N.W.T.	0	0	23	903	23	903
Red Lake, Ont.	0	0	25	393	25	393
Red Sucker Lake, Man.	0	0	3	78	3	78
Regina, Sask.	107	12922	31	1271	138	14193
Repulse Bay, N.W.T.	0	0	3	100	3	100
Resolute Bay, N.W.T.	4	224	2	40	6	264
Rimouski, Qué.	0	0	20	120	20	120
Round Lake, Ont.	0	0	6	90	6	90
Rouyn/Noranda, Qué.	19	2040	3	69	22	2109
Rupert House, Qué.	0	0	18	360	18	360
Sachs Harbour, N.W.T.	0	0	4	60	4	60
Saguenay/Bagotville, Qué.	18	2142	12	180	30	2322
Saint John, N.B.	54	5712	20	800	74	6512
Salmon Arm, B.C.	0	0	26	390	26	390
Sandspit, B.C.	7	833	9	90	16	923
Sandy Lake, Ont.	0	0	6	90	6	90
Sans Souci Island, Ont.	0	0	3	30	3	30
Sarnia, Ont.	0	0	24	1200	24	1200
Saskatoon, Sask.	92	10961	61	2085	153	13046
Sault Ste. Marie, Ont.	46	5270	30	720	76	5990
Schefferville, Qué.	7	833	2	30	9	863
Sechelt, B.C.	0	0	19	342	19	342
Sept-Iles, Qué.	38	4420	31	850	69	5270
Sioux Lookout, Ont.	0	0	40	600	40	600
Smithers, B.C.	7	833	0	0	7	833
Spence Bay, N.W.T.	0	0	6	84	6	84
St. John's, Nfld.	82	10417	0	0	82	10417
St. Theresa Point, Man.	0	0	12	278	12	278
St.-Augustin, Qué.	0	0	5	50	5	50

Table B.5 (cont.)
SCHEDULED CARRIER ACTIVITY
ALL SECTORS
FOR WEEK OF AUG. 15-21, 1985

City / Airport	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Stephenville, Nfld.	30	3752	0	0	30	3752
Stewart, B.C.	0	0	3	30	3	30
Stony Rapids, Sask.	0	0	8	354	8	354
Sudbury, Ont.	31	3400	91	2955	122	6355
Sydney/Glace Bay, N.S.	48	5650	0	0	48	5650
Terrace Bay, Ont.	0	0	12	240	12	240
Terrace/Kitimat, B.C.	26	2954	0	0	26	2954
Tête-à-la-Baleine, Qué.	0	0	10	100	10	100
The Pas, Man.	6	714	0	0	6	714
Thompson, Man.	12	1428	1	40	13	1468
Thunder Bay, Ont.	91	10656	102	2482	193	13138
Timmins, Ont.	19	2058	82	1942	101	4000
Toronto (Buttonville), Ont.	0	0	23	345	23	345
Toronto (Island), Ont.	0	0	58	2900	58	2900
Toronto (Pearson Int'l), Ont.	1599	242146	344	10224	1943	252370
Trenton/Belleville, Ont.	0	0	29	435	29	435
Tuktoyaktuk, N.W.T.	0	0	20	300	20	300
Uranium City, Sask.	0	0	2	84	2	84
Val d'Or, Qué.	36	3370	9	309	45	3679
Vancouver Harbour, B.C.	0	0	86	1720	86	1720
Vancouver, B.C.	728	106948	606	16277	1334	123225
Victoria Harbour, B.C.	0	0	71	1420	71	1420
Victoria, B.C.	43	4968	310	9253	353	14221
Wabush/Labrador City, Nfld.	14	1666	2	30	16	1696
Watson Lake, Y.T.	5	545	3	18	8	563
Wawa, Ont.	0	0	19	380	19	380
Webequie, Ont.	0	0	5	100	5	100
Wemindji, Qué.	0	0	12	240	12	240
Whale Cove, N.W.T.	0	0	2	40	2	40
Whitehorse, Y.T.	15	1655	33	419	48	2074
Williams Lake, B.C.	8	952	24	840	32	1792
Windsor, Ont.	54	5930	13	623	67	6553
Winiak, Ont.	0	0	4	24	4	24
Winnipeg, Man.	338	40484	72	1761	410	42245
Wollaston Lake, Sask.	0	0	2	84	2	84
Wrigley, N.W.T.	0	0	4	56	4	56
Yarmouth, N.S.	14	1428	0	0	14	1428
Yellowknife, N.W.T.	37	3521	17	623	54	4144
Yorkton, Sask.	0	0	5	45	5	45
Total	7271	987987	5473	150979	12744	1138966

TABLE B.6
SUMMARY OF SCHEDULED CARRIER ACTIVITY
FOR WEEK OF AUG. 15-21, 1984 AND 1985

Departures and Seats

	Year	Jet		Non-Jet		Total	
		Dep.	Seats	Dep.	Seats	Dep.	Seats
Southern Domestic Sector	1984	4542	581496	2795	82901	7337	664397
	1985	4999	632979	3950	113089	8949	746068
Northern Domestic Sector	1984	555	56951	975	24241	1530	81192
	1985	522	54235	1175	28761	1697	82996
Transborder Sector	1984	1203	163001	190	3696	1393	166697
	1985	1362	178812	340	8809	1702	187621
International Sector	1984	362	112233	8	320	370	112553
	1985	388	121961	8	320	396	122281
All Sectors	1984	6662	913681	3968	111158	10630	1024839
	1985	7271	987987	5473	150979	12744	1138966

Percentage Change in Departures and Seats

	Jet		Non-Jet		Total	
	Dep.	Seats	Dep.	Seats	Dep.	Seats
Southern Domestic Sector	+10.1	+8.9	+41.3	+36.4	+22.0	+12.3
Northern Domestic Sector	-5.9	-4.8	+20.5	+18.6	+10.9	+2.2
Transborder Sector	+13.2	+9.7	+78.9	+138.3	+22.2	+12.6
International Sector	+7.2	+8.7	0.0	0.0	+7.0	+8.6
All Sectors	+9.1	+8.1	+37.9	+35.8	+19.9	+11.1

TABLE B.7
SCHEDULED CARRIER ACTIVITY
BY PROVINCE AND SECTOR
FOR WEEK OF AUG. 15-21, 1985

Prov.	Sector	Jet		Non-Jet		Total	
		Dep.	Seats	Dep.	Seats	Dep.	Seats
Nfld.	South : Intra-Provincial	88	10654	0	0	88	10654
	South : Inter-Provincial	87	11103	0	0	87	11103
	North : Intra-Provincial	26	2905	0	0	26	2905
	North : Inter-Provincial	9	1071	2	30	11	1101
	International	6	1380	0	0	6	1380
	Total	216	27113	2	30	218	27143
N.S.	South : Intra-Provincial	69	8036	0	0	69	8036
	South : Inter-Provincial	263	33311	70	2800	333	36111
	Transborder	14	1428	0	0	14	1428
	International	11	2858	7	280	18	3138
	Total	357	45633	77	3080	434	48713
P.E.I.	South : Inter-Provincial	29	3393	12	480	41	3873
N.B.	South : Intra-Provincial	20	2142	11	440	31	2582
	South : Inter-Provincial	101	10846	51	2040	152	12886
	Transborder	7	714	0	0	7	714
	Total	128	13702	62	2480	190	16182
Québec	South : Intra-Provincial	300	33839	233	5289	533	39128
	South : Inter-Provincial	403	52103	83	3057	486	55160
	North : Intra-Provincial	94	8966	224	4820	318	13786
	North : Inter-Provincial	17	1519	8	150	25	1669
	Transborder	284	37320	28	636	312	37956
	International	144	48326	0	0	144	48326
	Total	1242	182073	576	13952	1818	196025
Ont.	South : Intra-Provincial	751	85721	1323	37168	2074	122889
	South : Inter-Provincial	780	114194	98	3547	878	117741
	North : Intra-Provincial	0	0	252	5006	252	5006
	North : Inter-Provincial	1	56	13	183	14	239
	Transborder	608	82623	187	5515	795	88138
	International	124	37105	0	0	124	37105
	Total	2264	319699	1873	51419	4137	371118
Man.	South : Intra-Provincial	0	0	20	180	20	180
	South : Inter-Provincial	285	33537	27	815	312	34352
	North : Intra-Provincial	59	7021	92	1978	151	8999
	North : Inter-Provincial	0	0	24	795	24	795
	Transborder	42	4886	0	0	42	4886
	International	4	1228	0	0	4	1228
	Total	390	46672	163	3768	553	50440

TABLE B.7
SCHEDULED CARRIER ACTIVITY
BY PROVINCE AND SECTOR
FOR WEEK OF AUG. 15-21, 1985

Prov.	Sector	Jet		Non-Jet		Total	
		Dep.	Seats	Dep.	Seats	Dep.	Seats
Sask.	South : Intra-Provincial	11	1309	87	2832	98	4141
	South : Inter-Provincial	167	20348	26	525	193	20873
	North : Intra-Provincial	0	0	38	1668	38	1668
	Transborder	21	2226	14	672	35	2898
	Total	199	23883	165	5697	364	29580
Alta.	South : Intra-Provincial	252	29528	258	10790	510	40318
	South : Inter-Provincial	494	69876	35	1168	529	71044
	North : Intra-Provincial	41	4729	119	5760	160	10489
	North : Inter-Provincial	43	4503	0	0	43	4503
	Transborder	227	28277	8	159	235	28436
	International	49	13792	0	0	49	13792
	Total	1106	150705	420	17877	1526	168582
B.C.	South : Intra-Provincial	523	61293	1602	41270	2125	102563
	South : Inter-Provincial	376	51746	14	688	390	52434
	North : Intra-Provincial	58	6442	48	660	106	7102
	North : Inter-Provincial	35	3875	2	28	37	3903
	Transborder	159	21338	96	1694	255	23032
	International	50	17272	0	0	50	17272
	Total	1201	161966	1762	44340	2963	206306
N.W.T.	North : Intra-Provincial	86	8092	250	5873	336	13965
	North : Inter-Provincial	33	2856	29	950	62	3806
	International	0	0	1	40	1	40
	Total	119	10948	280	6863	399	17811
Y.T.	North : Intra-Provincial	0	0	64	670	64	670
	North : Inter-Provincial	20	2200	10	190	30	2390
	Transborder	0	0	7	133	7	133
	Total	20	2200	81	993	101	3193
Canada	South : Intra-Provincial	2014	232522	3534	97969	5548	330491
	South : Inter-Provincial	2985	400457	416	15120	3401	415577
	North : Intra-Provincial	364	38155	1087	26435	1451	64590
	North : Inter-Provincial	158	16080	88	2326	246	18406
	Transborder	1362	178812	340	8809	1702	187621
	International	388	121961	8	320	396	122281
	Total	7271	987987	5473	150979	12744	1138966

INDEX OF CONVENIENCE FOR DOMESTIC SCHEDULED SERVICES: NOTES FOR
TABLES B.8-B.10

The index of convenience detailed in Tables B.9 and B.10 is based on a convenience index used in a Civil Aeronautics Board (CAB) study entitled Competition and the Airlines, an Evaluation of Deregulation, (December 1982). The basic assumptions have been modified to reflect the Canadian situation.

Convenience, as measured by this index, is one aspect of the quality of service being provided by air carriers. Basically, the index relates the service offered with the service desired. The concept of convenience, as defined herein, has thus to do with flight times and flight routings and their ability to facilitate passenger journeys between points of origin and points of destination. For passengers, air services are convenient when their preferences concerning departure and arrival times can be satisfied.

This index of convenience is computed using two key variables: the flight duration and the schedule delay. The flight duration is determined by the speed of the aircraft and the routing of the flight, a non-stop flight taking less time. The schedule delay is measured as the difference between the arriving time of the flight and the time at which the traveller wants to arrive. Sometimes, a traveller will have a choice between two flights: one arriving at the desired time but involving one or more connections and, another arriving later than desired but not involving connections. For such situations, when a choice is to be made between the two available flights, it is assumed that travellers are willing to trade-off an hour of schedule delay for 45 minutes saved on the duration of the flight. This assumption was also used by the CAB and the index was found insensitive to small variations in the trade-off.

As noted earlier, the measurement of convenience requires that services offered be related to services demanded. The magnitude of this task given the data requirements and the size of the Canadian domestic network requires that a number of simplifying assumptions be made.

The first assumption relates to the time period considered. The indexes are calculated from the Official Airline Guide's flight listing for the first Monday in June each year. In order to account for both eastbound and westbound flights, the peak periods for arriving flights are defined as between 9:00 to 11:00 hours and 16:00 to 20:00 hours. The index as defined should thus be considered a peak travel index being calculated for peak hour flights during a peak travel period.

The second assumption relates to the underlying demand distribution of the desired arrival times. For purposes of this index, a homogeneous demand distribution is assumed, i.e., hypothetical travellers have desired arrival times spread every 15 minutes throughout the peak period of the day. In the absence of information on the actual and unconstrained distribution, this hypothetical distribution is used as one possible approximation.

The third assumption relates to the selection of domestic routes used as the basis for the computation of the index. From the eight airports

in Canada defined as either large or medium hubs, i.e., Halifax, Montréal, Ottawa, Toronto, Winnipeg, Calgary, Edmonton, and Vancouver, a sample of city pairs was drawn. Specifically, from the 28 possible combinations of cities, 14 were randomly selected. Those city pairs are identified in Table B.8.

Trips on the 14 routes selected were simulated using flights listed in the Official Airline Guide (June edition for the appropriate year). A minimum of 30 minutes is allowed if a connection has to be made on a given route.

The index for one route is the average of the weighted flight duration and schedule delay for all hypothetical passengers on that route during the peak period. The index for the convenience of air services as a whole is the weighted sum of the route indexes, the weights being the size of each route's passenger traffic as a proportion of the total origin and destination (O&D) passenger traffic for the selected routes.

Since each route has a specific length of haul, a second index is computed to remove the distance effect. Because the longer routes, like Toronto-Vancouver, have longer flight durations and consequently higher index values, the index for each route is "deflated" by its great circle distance. By doing so, the total index which is a weighted sum of every route index, is not biased by the length of the routes.

The basic index of convenience is reported in Table B.9, the distance adjusted index in Table B.10. In analyzing these tables it must be borne in mind that the index is a time cost index. When the index grows from one year to another it means that the services are less convenient or more costly in terms of time expenditure. It should, however, be noted that the 1984 indexes are weighted by O&D data for 1983. As the data become available, the indexes for 1984 will be weighted by their respective yearly passenger data as are the other years.

Table B.8

CITY PAIRS USED IN THE CALCULATION OF THE INDEX OF CONVENIENCE

1. Calgary-Montréal	8. Halifax-Ottawa
2. Calgary-Ottawa	9. Halifax-Toronto
3. Calgary-Vancouver	10. Halifax-Winnipeg
4. Calgary-Winnipeg	11. Montréal-Ottawa
5. Edmonton-Halifax	12. Montréal-Toronto
6. Edmonton-Montréal	13. Ottawa-Toronto
7. Edmonton-Ottawa	14. Toronto-Vancouver

Table B.9

INDEX OF CONVENIENCE (UNADJUSTED)
FOR A SAMPLE OF SERVICES BETWEEN THE LARGEST EIGHT
HUB AIRPORTS IN CANADA

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984*</u>
95.1	102.0	100.0	104.5	103.2	102.9	106.5	99.8	103.0

Table B.10

INDEX OF CONVENIENCE WITH DISTANCE FACTOR
FOR A SAMPLE OF SERVICES BETWEEN THE LARGEST EIGHT
HUB AIRPORTS IN CANADA

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984*</u>
98.7	105.4	100.0	97.7	96.2	93.2	94.4	93.8	94.6

Note: * The 1984 indexes are weighted by 1983 annual O&D data.

PART C

P R I C I N G

This part of the report presents information relative to pricing in both the Canadian and U.S. domestic markets.

Tables C.1 through C.4 provide information on the utilization of premium, full, and discounted fares in the domestic market. Background notes relative to the concepts and methodology employed accompany the tables.

Table C.5 compares the prices of full and discounted fares on the most heavily travelled city pairs in Canada with those of comparable city pairs in the United States. Background notes relative to the concepts and methodology employed accompany the table. Table C.6 contains revisions of the fare price comparison table published in the first issue of the Monitor (Volume 1, Number 1, January 1985).

Table C.7 provides information on the restrictions accompanying discounted fares in the Canadian and U.S. domestic markets. Background notes related to the concepts and methodology employed accompany the tables.

An overview of the detailed information presented in the tables of Part C is provided in the summary which follows.

SUMMARY

FARE TYPE UTILIZATION: TABLES C.1 TO C.4

The percentage of passengers carried on discount fares for Level I carrier domestic scheduled services rose from 45.1 in 1983 to 49.5% in 1984. This increase was accompanied by a decrease in the percentage of passengers carried on full fares from 49.2 to 45.9%.

Revenue per passenger-kilometre for the total of all fare type groups remained stable from 1983 to 1984 (10.6¢ in 1983 and 10.7¢ in 1984) and this stability is observed across the fare type groups.

Revenue per passenger-kilometre generally declined with an increase in the length of haul. As indicated in Table C.2, for every quarter and fare type, revenue per passenger-kilometre for a given distance category was consistently higher than the revenue per passenger-kilometre of a longer distance category. Annual revenue per passenger-kilometre also decreased with increasing passenger volume in the full and discounted fare type groups. This trend was repeated in the annual revenue per passenger-kilometre for the total of all fare type groups. The table on revenue per passenger-kilometre by hub category does not show similar simple patterns.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES: TABLE C.5

The fare prices listed for August 1985 in Table C.5 can be compared with those of the previous quarter (May 1985) and with those which were available one year earlier (August 1984). The major movements in prices for these two time periods are noted below.

May 1, 1985 to August 1, 1985

The fares for a sample of 29 Canadian city pairs were examined. There were no changes in the prices of the most frequently available full fares (modal fares) and there was only one price change in the lowest full fare among those 11 city pairs which offered a full fare lower than the modal fare. The lowest discounted fares (non-status fares) showed more price variations than full fares. They increased in 11 city pairs, decreased in five and remained constant in 13. Discounted fares fenced by no restrictions other than capacity and/or itinerary (lowest potential fares) were offered only in three city pairs.

In the U.S. case, the fares for a sample of 57 city pairs were examined. Both full and discounted fares changed for a higher proportion of city pairs in the U.S. than in Canada. Modal full fares changed in 11 U.S. city pairs and the lowest full fare, available in all city pairs, changed in 32 of them. Capacity and/or itinerary controlled discounted fares showed variations in 38 of the 48 city pairs in which they were offered. Finally, lowest discounted fares experienced either increases or decreases in 35 city pairs.

August 1, 1984 to August 1, 1985

The modal full fare increased by approximately 8% in all 29 Canadian city pairs. The number of city pairs which had a full fare lower than the modal fare increased from nine in August, 1984 to 11 in August, 1985. Among the 6 city pairs which had a lower full fare in both periods, the gap between the modal and lowest full fares widened in four city pairs and narrowed in the remaining two. The lowest discounted fares (non-status fares) showed more price variations than the full fares. Increases of up to 40% were observed in 12 city pairs; decreases of up to 36% were noted in 15 city pairs, and no fare changes were seen in two city pairs.

A wider range of changes in both full and discounted fares was observed in the U.S., compared to Canada. Thirty-two city pairs experienced increases in the modal full fare, of which 26 city pairs had increases of less than 10%. Further, no fare changes were observed in 16 city pairs and decreases ranging from 53 to 64% were observed in five of the nine city pairs that had reductions. All of the city pairs had a full fare lower than the modal fare and 52 city pairs showed changes in the lowest full fare. These changes combined with the changes in the modal fare resulted in a narrowing of the gap between the modal and lowest full fares in 22 city pairs, and in a widening of the gap in 24 city pairs. Capacity and/or itinerary controlled discounted fares were offered in 48 city pairs in August, 1984 and in August,

1985. Of the 46 city pairs common to both periods, 24 city pairs had increases of up to 81% and 18 city pairs had decreases of up to 56%. Finally, 45 city pairs out of 57 showed reductions in the lowest discounted fare, and 29 of these reductions were between 21 and 50%.

RESTRICTIONS ASSOCIATED WITH CANADIAN AND U.S. LOWEST-PRICED DOMESTIC AIR FARES

The comparison of Canadian and U.S. domestic air fares has been extended to include the major restrictions associated with the lowest-priced non-status fare available in each of the sample city pairs during the first week of August 1985. These are listed in detail in Table C.7 and are summarized below.

The lowest-priced air fare in the sample of Canadian city pairs was, in all cases, a capacity controlled return fare. The restrictions which occurred the most frequently among these fares were those governing advance booking and ticket purchase, typically requiring that reservations be made at least 14 (7) days before departure and that tickets be purchased by the close of the advance booking period or 14 (7) days after reservations were made, whichever was sooner. Most of the fares have a first Sunday minimum length of stay restriction; 60 days was the most common maximum length of stay, although 20% of the fares were not bound by any maximum stay. For the greater proportion of the sample, voluntary changes after issuance of the ticket were not permitted and no refund was made upon cancellation. Only one-third of the Canadian sample of fares was subject to restrictions vis-à-vis applicability to selected flights, days of the week, or hours of the day.

For the lowest-priced non-status fares in the sample of U.S. city pairs, capacity controls and return itineraries individually occurred relatively less frequently than in the Canadian sample, although the U.S. fares were more likely to be restricted to selected flights or days of the week, or to off-peak hours. Only one-third of the fares did not have limited applicability in this regard. The other forms of restrictions which occurred the most frequently included: a first Sunday minimum /21 day maximum length of stay; a 30 day advance booking period with ticket purchase required by the close of the advance booking period or 14 days after reservations were made, whichever was sooner; a 25% service charge with the applicable advance booking for voluntary changes after ticket issuance; and a 25% service charge for cancellations. Restrictions governing length of stay, advance booking, ticket purchase, changes, and cancellations were less prevalent in the U.S. sample than in the Canadian sample.

FARE TYPE UTILIZATION: NOTES FOR TABLES C.1-C.4

Tables C.1 to C.4 provide preliminary estimates for 1983 and 1984 on fare type utilization. These estimates are for passenger carriage on scheduled services operated within Canada by Level I carriers (including domestic portions of international flights). The estimates are derived from the Fare Basis Survey recently instituted by the Aviation Statistics Centre of Statistics Canada. Level I carriers covered by the survey are Air Canada, CP Air, Eastern Provincial Airways, Nordair, and Pacific Western Airlines.

Survey Concepts

Concepts of the Fare Basis Survey are reported in Statistics Canada's Service Bulletin 51-004 (Volume 16, No. 9, September 1984). Basically, participating carriers report passenger volume and revenue by fare code and coupon origin and destination (O&D). Coupon O&D refers to the point of enplanement and the point of deplanement covered by one flight coupon. A flight coupon is a coupon in an airline ticket, issued for transportation, which contains the itinerary of the passenger but is valid only for carriage between the passenger's point of enplanement and deplanement on a single flight as noted on the coupon. (Thus, for a trip involving one or more air carriers participating in the survey, a passenger would be counted each time a flight coupon was "lifted" from the ticket, i.e., each time a flight connection occurred within the itinerary covered by the ticket.) The flight coupon also provides the fare basis code, the class of service, stopover code, carrier, date of travel, flight number, and applicable fare.

Fare Type Groups

The fare basis codes reported by the participating carriers have been classified by general fare type groups. The fare type groups presented in the tables are as follows:

- i) Premium Fare comprising First Class;
- ii) Full Fare comprising full fare Regular Economy;
- iii) Discounted Fare comprising the various discount fares such as Charter Class, Seat Sale, Advance Purchase Excursion, Group, Senior Citizen, Youth, Family Plan Dependents, etc.; and
- iv) Other comprising Industry and Agency Discount fares and Military as well as unknown fare codes.

It should be noted that while the definition of the fare type groups remains constant, the individual fare plans included in each group may vary over time due to the addition and deletion of fare plans by participating air carriers and the further refinement of the allocation system in the Fare Basis Survey.

Table Categories

The previous issue of the Air Transport Monitor (Volume 1, Number 4, October 1985) presented for 1983 and 1984 the distribution of

domestic scheduled passenger traffic across fare types by distance, volume (density) and sector (North/South). The length of haul groupings and the volume groupings were also crosstabulated for southern and overall domestic scheduled traffic in the "Discounted Fares" category. Finally, tables by North and South presented the distribution of domestic passenger-kilometres and of average revenue per passenger-kilometre across fare types.

In this issue, Table C.1 presents, by hub category, the distribution of domestic scheduled passenger traffic across fare types. The hub categories have been defined as follows:

- a) Large: Toronto.
- b) Medium: Vancouver, Montréal (Dorval and Mirabel), Calgary, Edmonton (International and Municipal), Winnipeg, Ottawa, Halifax.
- c) Small: Regina, Saskatoon, Victoria, Québec, St. John's, Thunder Bay, Kelowna, Prince George, London, Moncton.
- d) Other: Any other city with an airport not listed in above categories.

Part E explains the methodology used to define these categories.

Tables C.2 to C.4 provide the average revenue per passenger-kilometre earned for each fare type in the domestic scheduled market. The first of these tables groups data by distance; the second, by volume and the last, by hub category. It should be noted that the data correspond to revenue and passenger-kilometre aggregations over the city pairs of a group. The use of such aggregations results in a loss of information on the city pairs from which revenues are obtained and consequently, on the relationships among different fares within a city pair. For this reason, the ratio of the discount fare average revenue to the full fare average revenue should not be used to derive a measure of average trip discount.

Reliability of Estimates

All estimates with a coefficient of variation of 25 or less are reported. Estimates with a coefficient of less than 10 can generally be considered reliable from a sampling point of view. Estimates with coefficients of variation between 10 and 25 are reported and marked with a single asterisk (*) and should be used with caution. Estimates with coefficients of variation greater than 25 are not reported but are denoted with a double asterisk (**). The coefficient of variation is the ratio of the estimate's standard error (i.e., square root of its variance) to the estimate itself, expressed as a percentage.

Table C.1

AIR CARRIER FARE BASIS STATISTICS - SCHEDULED SERVICES, LEVEL I CARRIERS
DOMESTIC PASSENGERS - DISTRIBUTION BY FARE TYPE AND HUB CATEGORY
BASED ON FLIGHT COUPON ORIGIN AND DESTINATION
PRELIMINARY ESTIMATES, 1983-1984

	Passengers ('000)		% DISTRIBUTION BY FARE TYPE GROUPS							
			Premium Fare		Full Fare		Discounted Fare		Other	
	1983	1984	1983	1984	1983	1984	1983	1984	1983	1984
ALL CATEGORIES										
First Quarter	3 112.1	3 304.7	0.7	0.7	56.5	50.1	36.8	43.4	6.0*	5.8*
Second Quarter	3 837.6	3 905.3	0.8	0.8	50.1	48.1	44.5	47.5	4.7	3.6
Third Quarter	3 998.7	4 289.4	0.7	0.7	43.2	41.2	49.8	54.4	6.3	3.7
Fourth Quarter	3 427.0	3 697.5	0.7	0.8	48.4	45.1	47.9	51.3	3.0	2.8
Annual	14 375.3	15 197.0	0.7	0.7	49.2	45.9	45.1	49.5	5.0	3.9
LARGE-MEDIUM										
First Quarter	1 042.4	1 154.3	1.4	1.3	56.0	47.3	34.4	43.6	8.3*	7.8*
Second Quarter	1 385.1	1 431.1	1.4	1.3	46.0	44.8	46.6	49.2	6.1	4.7
Third Quarter	1 397.9	1 568.3	1.3	1.3	37.2	36.5	53.3	57.0	8.3*	5.2
Fourth Quarter	1 233.4	1 291.8	1.4	1.6	44.1	44.9	50.9	49.7	3.7	3.8
Annual	5 058.9	5 445.5	1.3	1.4	45.1	42.9	47.0	50.4	6.6	5.3
LARGE-SMALL										
First Quarter	162.1	170.2	0.5	0.3	45.3	36.9	46.5	57.7	**	5.2*
Second Quarter	203.6	216.1	0.5*	0.4	40.5	36.1	53.1	59.6	6.0*	3.8
Third Quarter	228.9	248.0	0.3*	0.3	34.1	32.6	59.3	64.5	6.3*	2.5
Fourth Quarter	179.9	196.2	0.4*	0.4	36.6	36.2	59.6	61.2	3.5*	2.3*
Annual	774.5	830.5	0.4	0.4	38.7	35.3	55.1	61.0	5.9	3.4
LARGE-OTHER										
First Quarter	161.5	169.4	**	**	57.9	53.2	34.9	39.8	**	7.0*
Second Quarter	182.5	196.5	0.0	0.0*	56.2	52.9	38.9	43.7	5.0*	3.4*
Third Quarter	205.0	228.3	**	**	46.3	45.2	46.8	52.5	7.0*	2.3
Fourth Quarter	168.1	202.1	**	**	54.7	51.1	42.2	46.4	3.1	2.4*
Annual	717.1	796.2	**	0.0*	53.4	50.3	41.0	46.1	5.6*	3.6
MEDIUM-MEDIUM										
First Quarter	708.0	754.4	0.8	0.9	56.2	49.6	37.6	43.8	**	5.7*
Second Quarter	896.7	891.2	0.8	1.0	47.4	46.9	47.2	48.3	4.6	3.8
Third Quarter	909.6	960.3	0.8	0.9	41.7	39.0	51.1	55.7	6.4	4.4
Fourth Quarter	793.5	843.3	0.9*	1.0	47.2	44.2	49.0	51.9	3.0	3.0
Annual	3 307.8	3 449.2	0.8	0.9	47.7	44.7	46.6	50.3	4.9	4.2
MEDIUM-SMALL										
First Quarter	486.7	490.0	0.2*	0.1	52.1	47.8	42.5	46.7	5.2*	5.4*
Second Quarter	550.8	530.1	0.2	0.1*	51.1	48.3	45.2	48.7	3.5	2.9
Third Quarter	571.1	566.2	0.2*	0.2*	45.8	43.9	49.0	53.7	5.0*	2.3
Fourth Quarter	484.3	542.8	0.1*	0.2*	48.6	42.6	48.8	55.2	2.4	2.1
Annual	2 092.8	2 129.2	0.2	0.2	49.3	45.5	46.5	51.2	4.1	3.1
MEDIUM-OTHER										
First Quarter	461.2	471.2	**	**	64.0	60.8	33.4	36.9	2.6*	2.3*
Second Quarter	519.4	543.2	**	**	62.7	58.4	35.0	40.0	2.3*	1.7
Third Quarter	588.3	612.7	**	**	56.1	52.3	40.6	46.3	3.2*	1.4
Fourth Quarter	478.3	521.1	**	**	60.2	49.3	38.1	49.4	1.7	1.3
Annual	2 047.2	2 148.2	**	**	60.5	55.0	37.0	43.4	2.5	1.6
SMALL-SMALL										
First Quarter	4.9*	4.6*	**	-	53.7*	44.4*	43.9*	54.2*	**	**
Second Quarter	5.6	3.7	-	-	46.0*	41.6	52.2	54.3	**	**
Third Quarter	7.2	3.7	**	-	42.0	41.9	54.1	56.1	**	**
Fourth Quarter	5.4*	5.7*	-	**	44.2*	36.8*	55.4*	62.1	**	**
Annual	23.0	17.7	**	**	46.0	40.8	51.8	57.2	**	**
SMALL-OTHER										
First Quarter	45.4	48.1	-	-	67.9	66.9	31.2	32.3	**	0.8*
Second Quarter	46.9	49.5	-	-	71.6	67.3	27.3	32.1	1.0*	0.6*
Third Quarter	47.6	55.0	-	-	66.6	66.5	31.9	32.9	1.0*	0.6*
Fourth Quarter	45.8	57.7	-	-	67.1	49.2	32.5	50.0	0.4*	0.8*
Annual	185.7	210.4	-	-	68.3	62.0	30.7	37.3	1.0	0.7
OTHER-OTHER										
First Quarter	39.9	42.6	-	-	70.9	65.9	27.4	31.5	**	2.6*
Second Quarter	47.0	44.0	-	-	70.6	68.0	28.6	31.0	0.8*	1.0*
Third Quarter	43.1	46.9	-	-	67.5	63.5	31.3	34.7	**	1.8
Fourth Quarter	38.3	36.7	-	-	71.3	64.4	26.7*	34.8	**	0.9*
Annual	168.3	170.1	-	-	70.1	65.4	28.6	33.0	1.4*	1.6

Notes: Due to roundings, the sum of quarterly passenger data may vary slightly from the annual passenger total and the sum of fare type percentages within a quarter may vary slightly from 100.0

* Indicates a coefficient of variation between 10 and 25.

** Indicates a coefficient of variation more than 25.

Source: Air carrier statements filed with the Air Transport Committee.

Table C.2

AIR CARRIER FARE BASIS STATISTICS - SCHEDULED SERVICES, LEVEL I CARRIERS
REVENUE PER DOMESTIC PASSENGER-KILOMETRE - DISTRIBUTION BY FARE TYPE GROUP AND LENGTH OF HAUL
BASED ON FLIGHT COUPON ORIGIN AND DESTINATION
PRELIMINARY ESTIMATES, 1983 - 1984

CENTS PER KILOMETRE										
	All Fares		Premium Fare		Full Fare		Discounted Fare		Other	
	1983	1984	1983	1984	1983	1984	1983	1984	1983	1984
All Distances										
First Quarter	11.5	11.3	17.2	18.7	14.8	15.8	7.9	7.4	10.5	12.5
Second Quarter	10.3	10.6	17.8	18.0	15.0	15.7	6.9	7.1	9.7	9.4
Third Quarter	10.3	10.1	17.7	16.4	14.8	15.6	7.7	7.5	9.8	8.4
Fourth Quarter	10.4	11.1	18.9	17.1	15.8	16.1	6.8	7.8	8.6	8.9
Annual	10.6	10.7	17.9	17.5	15.1	15.8	7.3	7.5	9.8	9.8
0-600 Kilometres										
First Quarter	19.8	20.4	33.8	37.5	22.2	23.6	14.3	14.7	17.0	19.6
Second Quarter	20.1	20.1	36.0	35.2	22.8	23.6	14.8	14.5	15.7	14.5
Third Quarter	19.7	19.6	36.7	32.3	22.6	23.6	15.5	14.8	16.1	13.2
Fourth Quarter	20.3	19.7	37.9	33.3	23.6	24.1	14.9	14.4	14.1	13.7
Annual	20.0	20.0	36.3	34.4	22.8	23.7	14.9	14.6	15.9	16.0
601-1200 Kilometres										
First Quarter	13.1	13.2	23.0	25.6	15.9	17.0	9.7	9.5	11.5	13.3
Second Quarter	12.8	13.0	24.0	24.3	16.2	17.0	9.5	9.4	10.4	10.1
Third Quarter	13.0	12.9	24.3	22.6	16.2	16.9	10.3	10.0	10.9	9.6
Fourth Quarter	13.2	12.9	25.6	23.1	16.9	17.4	9.8	9.8	8.3	8.9
Annual	13.0	13.0	24.2	23.8	16.3	17.1	9.8	9.7	10.6	10.9
1201-2400 Kilometres										
First Quarter	9.8	9.7	18.0	19.4	12.3	13.1	7.3	6.9	9.6	11.0
Second Quarter	9.3	9.4	19.0	18.6	12.5	13.1	6.9	6.9	9.1	8.8
Third Quarter	9.4	9.5	18.7	17.0	12.7	13.2	7.6	7.6	9.0	8.0
Fourth Quarter	9.1	9.6	20.0	18.0	13.2	13.7	6.7	7.1	7.5	7.9
Annual	9.4	9.5	18.9	18.2	12.6	13.3	7.1	7.2	9.0	9.2
2401 Kilometres or More										
First Quarter	8.3	7.8	16.3	17.5	10.5	11.1	6.1	5.4	8.7	9.4
Second Quarter	7.1	7.3	16.5	16.7	10.7	11.2	5.0	5.3	8.5	8.1
Third Quarter	7.5	7.2	16.6	15.3	10.7	11.3	6.0	5.7	8.7	7.7
Fourth Quarter	6.8	7.8	17.5	15.9	11.1	11.6	4.7	5.5	7.3	7.6
Annual	7.3	7.5	16.7	16.3	10.7	11.3	5.4	5.5	8.5	8.1

Notes: * Indicates a coefficient of variation between 10 and 25.

** Indicates a coefficient of variation more than 25.

Source: Air carrier statements filed with the Air Transport Committee.

Table C.3

AIR CARRIER FARE BASIS STATISTICS - SCHEDULED SERVICES, LEVEL I CARRIERS
REVENUE PER DOMESTIC PASSENGER-KILOMETRE - DISTRIBUTION BY FARE TYPE GROUP AND VOLUME
BASED ON FLIGHT COUPON ORIGIN AND DESTINATION
PRELIMINARY ESTIMATES, 1983 - 1984

	CENTS PER KILOMETRE									
	All Fares		Premium Fare		Full Fare		Discounted Fare		Other	
	1983	1984	1983	1984	1983	1984	1983	1984	1983	1984
All Volumes										
First Quarter	11.5	11.3	17.2	18.7	14.8	15.8	7.9	7.4	10.5	12.5
Second Quarter	10.3	10.6	17.8	18.0	15.0	15.7	6.9	7.1	9.7	9.4
Third Quarter	10.3	10.1	17.7	16.4	14.8	15.6	7.7	7.5	9.8	8.4
Fourth Quarter	10.4	11.1	18.9	17.1	15.8	16.1	6.8	7.8	8.6	8.9
Annual	10.6	10.7	17.9	17.5	15.1	15.8	7.3	7.5	9.8	9.8
0-9 Passengers/Day										
First Quarter	13.7	14.3	**	16.6	16.9	18.4	9.9	9.6	8.3	11.2
Second Quarter	13.0	13.4	16.6	**	17.2	18.1	9.4	9.0	7.7	9.3*
Third Quarter	13.3	13.1	16.5*	15.6	16.8	17.3	10.1	9.6	8.7	10.6
Fourth Quarter	13.4	13.7	**	**	17.5	18.4	9.2	9.5	8.2	10.6*
Annual	13.3	13.6	16.5*	16.3*	17.1	17.9	9.7	9.5	8.3	10.5
10-50 Passengers/Day										
First Quarter	13.3	13.6	15.6	18.6	16.5	17.8	9.4	9.1	10.1	12.1
Second Quarter	12.8	12.7	16.6	16.8	16.5	17.5	9.2	8.8	9.1	9.2
Third Quarter	12.5	12.3	17.0	14.2	16.5	17.1	9.6	9.3	8.9	9.2
Fourth Quarter	12.6	13.2	17.8	15.4	17.7	18.0	8.4	9.4	7.7	8.9
Annual	12.8	12.9	16.7	15.8	16.8	17.5	9.2	9.1	9.0	10.0
51-200 Passengers/Day										
First Quarter	13.1	13.3	16.9	18.6	16.0	17.3	9.4	9.0	11.0	12.4
Second Quarter	12.7	12.7	17.5	17.8	16.4	17.2	8.9	8.6	9.8	9.1
Third Quarter	12.4	12.0	17.4	15.8	16.3	17.1	9.5	8.8	9.9	8.4
Fourth Quarter	12.8	12.9	18.5	16.3	17.5	17.6	8.5	9.3	7.2	8.6
Annual	12.7	12.6	17.6	17.2	16.5	17.3	9.1	8.9	9.9	9.7
201-500 Passengers/Day										
First Quarter	11.5	11.8	17.2	18.1	14.6	16.1	8.0	7.8	10.6	12.9
Second Quarter	10.6	11.1	17.4	17.6	15.0	16.1	7.1	7.4	9.6	9.7
Third Quarter	10.6	10.6	17.4	15.8	14.9	15.9	8.0	7.9	9.9	8.9
Fourth Quarter	10.7	11.6	18.6	16.4	16.0	16.5	7.0	8.1	8.9	9.1
Annual	10.8	11.2	17.6	16.9	15.1	16.1	7.5	7.8	9.8	10.3
501 Passengers/Day or More										
First Quarter	11.0	10.5	17.3	18.8	14.3	15.1	7.4	6.9	10.4	12.3
Second Quarter	9.5	9.8	17.9	18.1	14.5	15.0	6.3	6.6	9.7	9.3
Third Quarter	9.4	9.4	17.8	16.6	14.0	14.7	7.1	7.0	9.8	8.1
Fourth Quarter	9.6	10.4	19.0	17.4	15.1	15.3	6.4	7.2	8.7	8.9
Annual	9.8	10.0	18.0	17.7	14.5	15.0	6.7	6.9	9.8	9.6

Notes: * Indicates a coefficient of variation between 10 and 25.

** Indicates a coefficient of variation more than 25.

Source: Air carrier statements filed with the Air Transport Committee.

Table C.4

AIR CARRIER FARE BASIS STATISTICS - SCHEDULED SERVICES, LEVEL I CARRIERS
REVENUE PER DOMESTIC PASSENGER-KILOMETRE BY FARE TYPE AND HUB CATEGORY
BASED ON COUPON ORIGIN AND DESTINATION
PRELIMINARY ESTIMATES, 1983-1984

	CENTS PER KILOMETRE									
	All Fares		Premium Fare		Full Fare		Discounted Fare		Other	
	1983	1984	1983	1984	1983	1984	1983	1984	1983	1984
ALL CATEGORIES										
First Quarter	11.5	11.3	17.2	18.7	14.8	15.8	7.9	7.4	10.5	12.5
Second Quarter	10.3	10.6	17.8	18.0	15.0	15.7	6.9	7.1	9.7	9.4
Third Quarter	10.3	10.1	17.7	16.4	14.8	15.6	7.7	7.5	9.8	8.4
Fourth Quarter	10.4	11.1	18.9	17.1	15.8	16.1	6.8	7.8	8.6	8.9
Annual	10.6	10.7	17.9	17.5	15.1	15.8	7.3	7.5	9.8	9.8
LARGE-MEDIUM										
First Quarter	10.4	10.1	17.0	18.4	13.7	14.6	6.9	6.5	10.2	12.5
Second Quarter	8.9	9.4	17.5	17.7	13.9	14.5	5.7	6.2	9.7	9.3
Third Quarter	8.8	8.9	17.3	16.3	13.3	14.2	6.6	6.6	9.6	8.0
Fourth Quarter	9.0	10.0	18.6	17.0	14.5	14.8	5.8	6.7	8.8	9.0
Annual	9.2	9.5	17.6	17.3	13.8	14.5	6.2	6.5	9.7	9.5
LARGE-SMALL										
First Quarter	9.5	9.3	16.5	16.9	12.1	12.9	7.0	6.9	9.9	11.1
Second Quarter	9.1	9.1	16.6	17.2	12.3	13.0	6.9	6.8	9.2	9.0
Third Quarter	9.4	9.1	16.9	15.1	12.2	12.9	7.8	7.4	9.3	8.6
Fourth Quarter	8.9	9.2	18.0	15.9	12.9	13.3	6.6	7.0	8.3	8.3
Annual	9.2	9.2	16.9	16.2	12.3	13.0	7.1	7.1	9.3	9.4
LARGE-OTHER										
First Quarter	14.2	14.5	**	**	18.0	19.3	9.6	9.4	13.8	17.7
Second Quarter	13.9	13.4	**	25.3*	17.9	19.0	9.7	8.9	12.7	11.9
Third Quarter	12.8	12.8	**	**	17.1	18.1	9.9	9.7	11.1	10.1
Fourth Quarter	14.2	13.6	**	28.4*	19.3	18.9	9.7	9.4	9.4*	11.4
Annual	13.7	13.5	**	27.2*	18.0	18.8	9.7	9.4	11.9	13.5
MEDIUM-MEDIUM										
First Quarter	10.8	10.6	17.6	19.2	13.7	14.7	7.6	7.1	9.8	11.5
Second Quarter	9.8	10.1	18.3	18.6	14.0	14.8	6.9	6.9	9.2	9.1
Third Quarter	9.9	9.6	18.3	16.7	13.9	14.6	7.6	7.3	9.6	8.8
Fourth Quarter	9.7	10.6	19.5	17.2	14.8	15.2	6.4	7.5	8.2	8.2
Annual	10.0	10.2	18.5	17.9	14.1	14.8	7.1	7.2	9.3	9.5
MEDIUM-SMALL										
First Quarter	14.2	14.0	22.0	21.2	17.6	18.4	10.5	9.9	12.7	14.0
Second Quarter	13.7	13.4	22.7	19.5	17.8	18.2	9.8	9.5	11.3	11.0
Third Quarter	13.5	12.9	23.0	18.8	17.6	17.8	10.4	9.7	11.5	9.4
Fourth Quarter	13.8	13.9	22.6	19.8	18.4	19.0	10.0	10.2	10.0	10.5
Annual	13.8	13.5	22.6	19.7	17.8	18.3	10.1	9.8	11.6	11.9
MEDIUM-OTHER										
First Quarter	15.5	16.4	13.9*	**	18.0	19.5	11.4	11.8	10.9	13.5
Second Quarter	15.6	15.9	**	**	18.4	19.3	11.5	11.5	9.2	9.5
Third Quarter	15.4	15.5	18.4*	28.0*	18.2	19.1	12.0	11.9	10.1	8.8
Fourth Quarter	16.4	15.8	**	18.0	19.5	19.9	12.1	11.8	7.3	9.3
Annual	15.7	15.9	18.5*	22.1*	18.5	19.4	11.8	11.7	9.6	10.4
SMALL-SMALL										
First Quarter	15.1	13.7	**	-	18.7	18.9	11.8	10.4	9.5*	14.7
Second Quarter	14.6	11.8	-	-	19.5	18.1	11.6	8.7	11.6*	**
Third Quarter	13.2	12.8	**	-	18.2	17.6	10.6	10.1	11.3	8.9*
Fourth Quarter	14.5	13.2	-	**	20.7	18.3	11.0	10.4	**	**
Annual	14.2	12.9	**	**	19.2	18.2	11.1	9.9	11.1	10.3*
SMALL-OTHER										
First Quarter	19.6	20.5	-	-	22.6	24.3	14.3	14.3	12.2*	12.4
Second Quarter	20.0	19.8	-	-	22.9	24.0	14.4	13.0	10.6	**
Third Quarter	19.2	19.5	-	-	22.3	23.4	14.5	13.6	10.6	11.0
Fourth Quarter	20.6	19.0	-	-	24.1	23.7	14.8	14.6	7.3	12.1*
Annual	19.8	19.7	-	-	22.9	23.8	14.5	14.0	10.6	12.4
OTHER-OTHER										
First Quarter	20.8	21.0	-	-	22.7	23.9	15.8	15.2	39.9*	23.7*
Second Quarter	20.5	20.1	-	-	22.9	23.0	15.6	14.4	10.9*	21.0*
Third Quarter	19.6	19.8	-	-	21.7	22.5	15.7	15.5	9.0*	15.3
Fourth Quarter	21.8	21.0	-	-	24.3	24.0	16.1	15.2	**	16.9*
Annual	20.6	20.4	-	-	22.8	23.3	15.8	15.1	14.2*	18.7

Notes: * Indicates a coefficient of variation between 10 and 25.
** Indicates a coefficient of variation more than 25.

Source: Air carrier statements filed with the Air Transport Committee.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES: NOTES FOR TABLE C.5

City Pairs Selected

The accompanying table provides information on air fares between selected city pairs in Canada and the U.S. The Canadian city pairs are those which in 1977 recorded traffic volumes in excess of 100 000 coupon origin and destination (O&D) passengers per year.¹ Each Canadian city pair is matched with at least two U.S. city pairs. The U.S. city pairs were selected on the basis of their similarity to the Canadian city pairs in terms of distance and volume (1977 coupon O&D traffic) characteristics.

Fares offered in these city pairs for previous time periods have been analyzed in: The Low-Priced Air Fare Review: The First Five Years, Canadian Transport Commission, Report No. 1983/05, Ottawa/Hull, November 1983; The Low-Priced Air Fare Review: A Three-Year Perspective, Canadian Transport Commission, Report No. 1982/02, Ottawa/Hull, March 1982.

Carrier Coverage

Carriers reporting service and fare information to the Airline Tariff Publishing Company and/or the Official Airline Guide are included in this review of air fares.

For Canada, this includes fares offered on scheduled commercial air services, regular specific point commercial air services, and certain specific point commercial air services² (that is, Class 1, 2, and 3 air services) provided by Canadian air carriers.

For the United States, this includes fares offered on services provided by American certificated and commuter air carriers.

Fare Types

Four fares are reported for each city pair. They include two full adult fares, the modal and the lowest-priced; and two discounted fares, the lowest-priced potential full fare and the lowest-priced non-status fare. The definitions of these fare types follow.

Full Adult Fares

A full adult fare is a one-way fare designated by fare class and code as an Economy (Y or K), Coach (Y), or Standard Class (S) fare. Full adult fares are not subject to the purchase, travel, or capacity restrictions which characterize discounted fares.

Modal Full Fare

In many city pairs a range of full fares is offered. The modal full fare is that full fare offered by the dominant carrier(s) in the city pair as defined by the maximum number of non-stop departing flights per week.³ This fare must be available for travel during peak hours⁴ every day of the week.

Lowest-Priced Full Fare

The lowest-priced full fare is the least expensive full fare which is available for travel during peak hours Monday through Friday. This fare may be offered by any participating carrier in the city pair.

Discounted Adult Fares

Lowest-Priced Potential Full Fare

A potential full fare is a one-way fare designated by such fare classes as Thrift, Thrift Discounted, Economy Discounted, or Coach Discounted and such codes as H, K, M, S, V, and Q.

Potential full fares have no advance purchase, minimum stay, nor return travel conditions. However, these fares are frequently capacity and/or itinerary controlled and generally offer less service amenity than do Economy, Coach, or Standard Class fares.

The lowest-priced potential full fare is the least expensive potential full fare available for travel during peak hours Monday through Friday. This fare may be offered by any participating carrier in the city pair. The absence of a potential full fare in a given city pair is indicated by a dash (-) in the corresponding cell. If a potential full fare is available but at a higher price than the lowest-priced full fare, then the latter price is reported as the lowest potential full fare.

Lowest-Priced Non-Status Fare

This is the lowest-priced fare available for travel between the city pair during the survey period. These fares are frequently restricted by travel conditions such as advance purchase, minimum stay, or return requirements or may be available only in off-peak travel periods such as evenings or weekends.

Fares dependent on the basic demography of the passenger, such as Senior Citizen, Youth, Children, Military, Government Travel, Clergy, Job Training, Family Plan, Inclusive Tour, and Group are defined as status fares and are not included in determining the lowest-priced non-status fare.

How the Data Are Assembled

For each identified Canadian and U.S. city pair, a preliminary listing is made of (1) carrier participants, (2) the price of the full fare offered by each carrier, (3) the lowest-priced potential full fare, and (4) the lowest-priced non-status fare. This preliminary listing is taken from the Airline Tariff Publishing Company's Electronic Tariff as reported on February 1, May 1, August 1, or November 1, as appropriate and from the applicable tariffs of People Express and Southwest Airlines. Restrictions relative to the air fares are taken from the first published edition of the Airline Tariff Publishing Company's The Official North American Passenger Tariff following the study date.

Reference is then made to the Official Airline Guide (the February 1, May 1, August 1, or November 1 edition, as appropriate) so as to define the dominant carrier(s) in the city pair for the purpose of selecting the modal full fare from the listing of full fares. In so doing, carriers may be identified over and above those recorded in the preliminary carrier listing. Fare information for carriers identified in this step is obtained from the fare issue of the Official Airline Guide and from air carrier tariffs filed with the Air Transport Committee. Conversely, if there is a carrier which is included in the preliminary listing but is not identified in the Official Airline Guide, the carrier is contacted to ascertain whether or not it offers service for the city pair in question. Carriers may also be contacted to verify prices, codes, or restrictions associated with particular fares offered if the information available from published sources appears to be incomplete or inconsistent. On the basis of this additional information, the fares in the preliminary listing are revised as required.

Further Notes on the Selection Process

To be listed as a candidate, a fare must be available for travel from the point of origin on the seventh day of the survey month. Thus, if a carrier makes a new fare available for travel sometime during the first seven days of the survey month, and the fare is offered at least until the seventh day, the fare will be listed. Similarly, if a fare is available for travel throughout the first seven days of the survey month, but a price change occurs sometime during those seven days, the fare will be listed at the new price. Finally, a fare will not be listed if its availability during the first week of the survey month is restricted to booking and purchase.

FOOTNOTES

¹ Victoria-Vancouver is not included because comparable U.S. markets, defined by distance and traffic volume criteria, were not found.

² Classes of air service are defined in Table A.1.3 of the first two issues of the Air Transport Monitor (Volume 1, Number 1, January 1985 and Volume 1, Number 2, April 1985).

³ There are two exceptions to the general rule for determining the dominant carrier(s):

- a) If two or more (groups of) carriers offering full adult fares which differ in price are tied for the maximum number of non-stop departing flights per week, the dominant (group of) carrier(s) is defined as the one which offers the maximum number of available seats on non-stop departing flights per week. Aircraft capacity data are obtained from the Official Airline Guide; if this source provides only a range of seating capacity for a given aircraft type, the mean of the upper and lower ends of the range is used as the measure of capacity for that aircraft type.
- b) If non-stop service is not offered in a given city pair, the determination of dominant carrier(s) is based on direct service.

⁴ The term 'peak hours' is defined by changes in the fare charged by a carrier over a 24-hour period and is thus carrier- and market-specific.

Table C.5

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARE^a
(CANADIAN FARES IN CURRENT CANADIAN DOLLARS, U.S. FARES IN CURRENT U.S. DOLLARS)

AUGUST 1, 1985

City Pair	1977 Passenger Volume	One-Way Distance (km)	Return Full Fares		Return Discounted Fares	
			Modal	Lowest	Lowest Potential Full Fare	Lowest Non-Status Fare
Montréal-Toronto	1 403 430	506	246	214	-	109
Boston-New York	2 100 230	307	120	100	93	60
Chicago-Minneapolis	1 141 950	550	287	130	130	91
Ottawa-Toronto	790 260	363	214	158	-	90
New York-Pittsburgh	867 600	518	183	120	120	83
Chicago-St. Louis	727 060	412	115	87	87	59
Calgary-Edmonton	590 110	248	136	112	-	68
Houston-New Orleans	582 010	501	109	109	109	81
Atlanta-Birmingham	554 040	216	189	189	-	81
Montréal-Ottawa	281 160	151	166	118	-	77
Chicago-Moline	279 250	235	120	117	85	54
Fresno-San Francisco	277 540	266	139	139	100	97
Harrisburg-Pittsburgh	267 850	280	196	196	128	128
Montréal-Québec	281 720	235	184	184	-	83
Chicago-Moline	279 250	235	120	117	85	54
Fresno-San Francisco	277 540	266	139	139	100	97
Harrisburg-Pittsburgh	267 850	280	196	196	128	128
London-Toronto	129 430	142	166	166	-	60
Baltimore-Boston	206 640	595	278	115	115	91
Las Vegas-Phoenix	205 680	410	72	72	65	65
Kelowna-Vancouver	149 040	281	162	112	-	55
Richmond-Washington	149 910	154	128	115	91	55
Burbank-Las Vegas	145 490	359	165	93	83	74
Toronto-Windsor	146 550	313	202	202	-	101
Charlotte-Washington	145 120	526	276	146	146	91
Chicago-Kalamazoo	144 830	187	146	146	-	100
Prince George-Vancouver	140 050	524	258	258	-	99
Charlotte-Greenville	141 870	121	109	109	109	77
Baltimore-Pittsburgh	138 790	323	193	167	163	81
Sudbury-Toronto	136 860	340	206	202	-	99
Champaign-Chicago	137 470	209	120	120	-	72
Kansas City-Omaha	136 230	256	165	72	72	72
Edmonton-Fort McMurray	121 180	400	204	174	-	122
Syracuse-Washington	122 850	478	256	100	100	61
Atlanta-Fayetteville	120 320	531	344	326	-	123
Sault Ste. Marie-Toronto	118 020	494	240	240	-	120
Charlotte-Columbia	118 130	143	156	146	109	72
Greensboro-Washington	116 490	393	246	146	146	81

Table C.5 (Cont'd)

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES
(CANADIAN FARES IN CURRENT CANADIAN DOLLARS, U.S. FARES IN CURRENT U.S. DOLLARS)

AUGUST 1, 1985

City Pair	1977 Passenger Volume	One-Way Distance (km)	Return Full Fares		Return Discounted Fares	
			Modal	Lowest	Lowest Potential Full Fare	Lowest Non-Status Fare
Regina-Winnipeg	106 000	532	248	248	-	149
Minneapolis-Sioux Falls	104 720	317	209	209	185	81
Chicago-Waterloo	103 250	389	156	156	128	100
Calgary-Vancouver	438 260	685	278	278	236	149
Denver-San Francisco	423 300	1 540	259	259	222	183
Chicago-Hartford	407 300	1 252	509	202	202	146
Toronto-Winnipeg	396 200	1 502	452	452	-	155
Atlanta-Baltimore	395 850	927	417	146	146	146
Chicago-Houston	384 450	1 500	517	176	176	128
Edmonton-Vancouver	354 230	808	306	260	-	169
Denver-Las Vegas	349 510	991	148	148	148	128
Charlotte-New York	347 450	864	394	146	146	91
Halifax-Toronto	270 270	1 287	408	408	-	198
Atlanta-Dayton	270 010	695	352	219	-	105
Atlanta-Sarasota	267 800	715	357	357	-	231
Halifax-Montréal	217 130	803	306	306	244	168
Atlanta-Melbourne	215 320	713	357	357	-	151
Denver-San Diego	212 310	1 352	231	204	204	167
Thunder Bay-Toronto	204 020	909	326	326	-	163
Chicago-Tulsa	203 320	945	396	378	267	128
Los Angeles-Tucson	195 320	724	185	109	109	91
Calgary-Winnipeg	146 270	1 191	384	384	326	230
Cleveland-St. Louis	144 530	792	369	359	-	91
Charlotte-Chicago	143 070	948	372	237	237	128
Edmonton-Winnipeg	127 600	1 187	384	326	-	230
Memphis-New York	125 840	1 539	526	491	380	128
Atlanta-Syracuse	124 510	1 276	546	509	-	152
Halifax-St. John's	114 710	880	320	320	-	176
Dallas-Louisville	113 390	1 173	470	452	337	146
Philadelphia-St. Louis	119 560	1 318	509	487	287	146
Calgary-Regina	105 610	661	274	274	-	164
Los Angeles-Reno	106 290	620	183	183	146	91
Atlanta-Providence	104 000	1 453	526	181	181	144
Toronto-Vancouver	539 290	3 342	842	842	-	379
Chicago-Phoenix	565 940	2 326	661	324	324	183
Atlanta-Los Angeles	500 310	3 312	789	361	361	219
Calgary-Toronto	370 840	2 686	704	598	-	319
Los Angeles-Washington	376 410	3 682	846	369	369	239
Los Angeles-Minneapolis	354 040	2 454	704	361	361	202

Table C.5 (Cont'd)

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES
(CANADIAN FARES IN CURRENT CANADIAN DOLLARS, U.S. FARES IN CURRENT U.S. DOLLARS)

AUGUST 1, 1985

City Pair	1977 Passenger Volume	One-Way Distance (km)	Return Full Fares		Return Discounted Fares	
			Modal	Lowest	Lowest Potential Full Fare	Lowest Non-Status Fare
Edmonton-Toronto	294 400	2 687	704	598	-	319
Los Angeles-St. Louis	299 590	2 544	667	361	361	202
New Orleans-New York	285 240	1 901	600	296	287	165
Vancouver-Winnipeg	176 220	1 862	530	530	-	239
Houston-San Francisco	183 500	2 651	315	315	278	128
Philadelphia-San Francisco	167 740	4 065	887	417	417	219
Montréal-Vancouver	128 010	3 679	914	914	-	459
Miami-San Francisco	124 560	4 168	876	361	343	239
Las Vegas-St. Louis	122 240	2 208	613	361	333	165
Regina-Toronto	105 960	2 027	564	564	-	309
Houston-Las Vegas	106 650	1 976	239	202	202	146
Dallas-San Jose	103 200	2 324	667	324	324	183

Note: These fares do not include tax.

Sources: ATPCO Electronic Tariff, August 1, 1985.
ATPCO The Official North American Passenger Tariff, August 7, 1985.
Official Airline Guide, August 1, 1985.
Air carrier tariffs filed with the Air Transport Committee.
Airline Flight Schedules of People Express and Southwest Airlines.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES — REVISIONS: NOTES FOR TABLE C.6

The fare data in Table C.6 are revisions to August 1984 air fares originally published in Table C.7 of the first issue of the Air Transport Monitor (Volume 1, Number 1, January 1985). The revised data are listed separately for Canada and the U.S., in alphabetical order by city pair. For each city pair in the table, the revised fares are listed in the appropriate columns. A blank in any fare column indicates that no revision of the original fare is necessary. A dash (-) in the column for the lowest-priced potential full fare indicates a revision from the original fare to "no potential full fare available" for the city pair in question.

For the most part the revisions are required as a result of incomplete information from available sources (which has subsequently been supplemented by information obtained directly from the carriers involved) and inconsistencies in the application of the methodology for selection of the fares. The revisions for the fare comparison table from the August 1984 survey period have been included in this issue of the Air Transport Monitor in order to accommodate comparisons which may be drawn between fares from August 1984 and those from August 1985, which are presented in Table C.5.

Table C.6

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

REVISIONS TO VOLUME 1, NUMBER 1, JANUARY 1985

FARE SURVEY DATE: AUGUST 1, 1984

City Pair	Return Full Fares		Return Discounted Fares	
	Modal Full Fare	Lowest Full Fare	Lowest Potential Full Fare	Lowest Non-Status Full Fare
<u>CANADA</u>				
Calgary - Winnipeg		284	-	
Sudbury - Toronto		176		
Toronto - Windsor		168		
<u>U.S.</u>				
Boston - New York	83			
Champaign - Chicago	107	107	-	
Chicago - Kalamazoo	152	152	-	
Chicago - Moline	111	111		
Chicago - Waterloo		183		
Dallas - San Jose		369		
Denver - San Francisco	231			
Kansas City - Omaha	159			
Los Angeles - Tucson		111		
Minneapolis - Sioux Falls		157		
New York - Pittsburgh	183			
Philadelphia - St. Louis		469		
Richmond - Washington	115			

Notes: Canadian fares are in current Canadian dollars.
U.S. fares are in current U.S. dollars.
These fares do not include tax.

Sources: ATPCO Electronic Tariff, August 1, 1984.
ATPCO Passenger Tariff, August 8, 1984.
Official Airline Guide, August 1, 1984.
Airline Flight Schedules of People Express and Southwest Airlines.

RESTRICTIONS ASSOCIATED WITH CANADIAN AND U.S. LOWEST-PRICED DOMESTIC AIR
FARES: NOTES FOR TABLE C.7

The information on fare restrictions in Table C.7 is provided as a complement to the fare price data presented in Table C.5. Its purpose is to indicate the wide range of conditions which may accompany heavily discounted fares. The methodology relevant to Table C.7 with respect to the sample of city pairs, carrier coverage, and definition of fare types is identical to that used to construct Table C.5.

For each city pair in the sample the lowest priced non-status fare is listed with its associated set of restrictions. The percentage discount from the modal full fare is listed as well, to indicate the trade-off which exists between the savings in price and the sacrifice in convenience of discounted fares.

The restrictions included in the table are those which are deemed to be the most important vis-à-vis characterization of the fare, frequency of occurrence, or expected impact on air travellers. Thus, information is provided on restrictions relating to minimum and maximum length of stay, advance booking, ticket purchase, and voluntary changes to or cancellation of the fare. The table also indicates limited applicability regarding flights, hours of the day, or days of the week; itinerary controls; and baggage restrictions which differ from those of the full fare. Fares which are capacity controlled are identified as well. The codes used for each category of restrictions are defined in the legend at the end of Table C.7.

While the coverage of restriction categories encompassed in the table is extensive, it should not be viewed as complete. For example, for some discounted fares, there may be restrictions governing stopovers or fare combinations, or amenities offered, such as meal service, which differ from the full fare. It is also noted that the restrictions relating to voluntary changes or cancellation of the fare are those which apply after issuance of the ticket and before departure of the flight. That is, rules governing changes and cancellation after departure of the flight may vary from those shown in Table C.7. Also, most (but not all) carriers will waive penalties for changes or cancellation in case of illness or death in the immediate family.

A final qualification to be made regarding Table C.7 relates to the uniqueness of the set of restrictions for the lowest-priced non-status fare. In a given city pair, the lowest-priced fare may be offered by more than one carrier, and the participating carriers may not match one another in their respective sets of restrictions which apply to the fare. Also, there need not be a carrier whose fare is the least restrictive among the set. Therefore, for city pairs in which more than one carrier offers the lowest-priced fare, an arbitrary choice is made for representation in the restrictions table.

Table C.7
RESTRICTIONS APPLICABLE TO LOWEST NON-STATUS FARES, BY CITY PAIR

Restrictions															
City Pair	Modal Full Fare \$	Lowest Non-Status Fare \$	Discount from Full Fare %	Length of Stay		Advance Booking	Ticket Purchase	Changes	Cancellation	Capacity Controlled	Applicability	Itinerary	Baggage		
				Min:	Max:										
Montréal-Toronto	246	109	56	1st Su	60	14	AB/14	NC	100%	X	2346	RT	-		
Boston-New York	120	60	50	-	-	-	-	-	-	-	1234570P & 6	RT	-		
Chicago-Minneapolis	287	91	68	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-		
Ottawa-Toronto	214	90	58	1st Su	-	7	AB/7	-	-	X	-	RT	-		
New York-Pittsburgh	183	83	55	-	-	-	-	-	-	-	123450P & 67	-	\$3		
Chicago-St. Louis	115	59	49	-	-	-	-	-	-	-	123450P & 67	-	-		
Calgary-Edmonton	136	58	50	1st Su	60	14	AB/7	AB \$30	\$30	X	-	RT	-		
Houston-New Orleans	109	81	26	-	-	-	-	-	-	-	123450P & 67	-	-		
Atlanta-Birmingham	189	81	57	1st Su	21	30	AB/14	AB 25%	25%	X	14567	RT	-		
Montréal-Ottawa	166	77	54	1st Su	-	7	AB/7	-	-	X	-	RT	-		
Chicago-Moline	120	54	55	1st Su	21	30	AB/14	AB/25%	25%	X	-	RT	-		
Fresno-San Francisco	139	97	30	1st Su	60	7	AB/14	AB -	10%	X	-	RT	-		
Harrisburg-Pittsburgh	196	128	35	-	-	-	-	-	-	X	-	-	-		
Montréal-Québec	184	83	55	7	3 mo	21	AB/7	AB \$30	\$30	X	50P & 67	RT	-		
Chicago-Moline	120	54	55	1st Su	21	30	AB/14	AB/25%	25%	X	-	RT	-		
Fresno-San Francisco	139	97	30	1st Su	60	7	AB/14	AB -	10%	X	-	RT	-		
Harrisburg-Pittsburgh	196	128	35	-	-	-	-	-	-	X	-	-	-		
London-Toronto	166	60	64	1st Su	-	7	AB/7	-	-	X	-	RT	-		
Baltimore-Boston	278	91	67	1st Su	21	30	AB/14	AB 25%	25%	-	-	RT	-		
Las Vegas-Phoenix	72	65	10	-	-	-	-	-	-	X	-	-	-		
Kelowna-Vancouver	162	55	66	1st Su	60	7	AB/7	AB \$30	\$30	X	OP	RT	-		
Richmond-Washington	128	55	57	-	14	-	-	-	-	-	F	-	-		
Burbank-Las Vegas	165	74	55	-	-	-	-	-	-	X	-	-	-		
Toronto-Windsor	202	101	50	1st Su	-	7	AB/7	-	-	X	-	RT	-		
Charlotte-Washington	276	91	67	-	-	-	-	-	-	-	67	SA	\$3		
Chicago-Kalamazoo	146	100	32	-	-	-	-	-	-	X	6	-	-		
Prince George-Vancouver	258	99	62	7	60	7	AB/7	AB \$30	\$30	X	OP	RT	-		
Charlotte-Greenville	109	77	29	1st Su	60	7	AB	-	-	X	-	RT	-		
Baltimore-Pittsburgh	193	81	58	1st Su	21	30	AB/14	AB 25%	25%	X	-	RT	-		
Sudbury-Toronto	206	99	52	1st Su	-	7	AB/7	-	-	X	-	RT	-		
Champaign-Chicago	120	72	40	1st Su	21	30	AB/14	AB/25%	25%	X	-	RT	-		
Kansas City-Omaha	165	72	56	-	-	-	-	-	-	-	-	-	-		
Edmonton-Fort McMurray	204	122	40	1st Su	60	14	AB/7	- \$30	\$30	X	-	RT	-		
Syracuse-Washington	256	61	76	-	-	-	-	-	-	-	67	SA	\$3		
Atlanta-Fayetteville	344	123	64	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-		
Sault Ste. Marie-Toronto	240	120	50	1st Su	60	14	AB/14	NC	100%	X	-	RT	-		
Charlotte-Columbia	156	72	54	7	21	30	AB/14	AB 25%	25%	X	-	RT	-		
Greensboro-Washington	246	81	67	1st Su	21	30	AB/14	AB 25%	25%	X	-	RT	-		
Regina-Winnipeg	248	149	40	1st Su	60	14	AB/14	NC	100%	X	-	RT	-		
Minneapolis-Sioux Falls	209	81	61	1st Su	21	30	AB/14	AB 25%	25%	X	-	RT	-		
Chicago-Waterloo	156	100	36	1st Su	21	30	AB/14	AB 25%OD	25%	X	-	RT	-		

(Table C.7 cont'd.)

Table C.7 cont'd.)

Restrictions

City Pair	Modal Full Fare \$	Lowest Non-Status Fare \$	Discount from Full Fare %	Length of Stay		Advance Booking	Ticket Purchase	Changes	Cancellation	Capacity Controlled	Applicability	Itinerary	Baggage
				Min:	Max:								
Calgary-Vancouver	278	149	46	1st Su	60	14	AB/14	NC	100%	X	2346	RT	-
	259	183	29	-	-	14	AB	AB -	-	-	1234	-	-
	509	146	71	1st Su	21	30	AB/14	AB 25%	25%	-	23	RT	-
Toronto-Winnipeg	452	155	66	1st Su	6 mo	14	AB/14	- \$50	\$50	X	OP F	RT	-
	417	146	65	-	-	-	-	-	-	X	-	-	\$3
	517	128	75	-	-	-	EF	- \$25	\$25	X	F	-	\$10 EF
	-	-	-	-	-	-	-	-	-	-	-	-	-
Edmonton-Vancouver	306	169	45	1st Su	60	14	AB/14	NC	100%	X	2346	RT	-
	148	128	14	1st Sa	21	30	AB	AB 25%	25%	X	567	RT	-
	394	91	77	-	-	-	-	-	-	-	123450P & 67	-	\$3
	-	-	-	-	-	-	-	-	-	-	-	-	-
Halifax-Toronto	408	198	51	-	-	24 hr.	AB	NC	100%	X	OP	RT	-
	352	105	70	1st Su	21	30	AB/14	AB 25%	25%	X	-	RT	-
	357	231	35	7	30	14	AB	AB 10XR	10%	X	-	RT	-
Halifax-Montréal	306	168	45	1st Su	60	14	AB/14	NC	100%	X	-	RT	-
	357	151	58	1st Su	21	30	AB/14	AB 25XR	25%	-	23	RT	-
	231	167	28	-	-	-	-	-	-	-	50P & 67	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
Thunder Bay-Toronto	326	163	50	1st Su	60	14	AB/14	NC	100%	X	-	RT	-
	396	128	68	7	21	30	AB/14	AB 25%	25%	X	23	RT	-
	185	91	51	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-
Calgary-Winnipeg	384	230	40	1st Su	60	14	AB/14	NC	100%	X	-	RT	-
	369	91	75	7	21	30	AB/14	AB 25%	25%	X	-	RT	-
	372	128	66	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-
Edmonton-Winnipeg	384	230	40	1st Su	60	14	AB/14	NC	100%	X	-	RT	-
	526	128	76	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-
	546	152	72	1st Su	21	14	AB	AB -	-	X	-	RT	-
Halifax-St. John's	320	176	45	1st Su	60	14	AB/14	NC	100%	X	-	RT	-
	470	146	69	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-
	509	146	71	7	21	30	AB/14	AB 25%	25%	X	23	RT	-
Calgary-Regina	274	164	40	1st Su	60	14	AB/14	NC	100%	X	-	RT	-
	183	91	50	7	21	30	AB/14	AB 25%	25%	X	23	RT	-
	526	144	73	1st Su	60	7	AB	AB -	-	X	-	RT	-
Toronto-Vancouver	842	379	55	1st Su	60	14	AB/14	NC	100%	X	13 F	RT	-
	661	183	72	7	21	30	AB/14	AB 25%	25%	X	23	RT	-
	789	219	72	-	-	-	EF	- \$25	\$25	X	F	-	\$10 EF
Calgary-Toronto	704	319	55	1st Su	180	14	AB/14	NC	100%	X	-	RT	-
	846	239	72	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-
	704	202	71	1st Su	21	30	AB/14	AB 25%	25%	X	230P	RT	-
Edmonton-Toronto	704	319	55	1st Su	180	14	AB/14	NC	100%	X	-	RT	-
	667	202	70	7	21	30	AB/14	AB 25%	25%	X	23	RT	-
	600	165	73	1st Su	21	30	AB/14	AB 25%	25%	X	23	RT	-
Vancouver-Winnipeg	530	239	55	1st Su	180	14	AB/14	NC	100%	X	-	RT	-
	315	128	59	-	-	-	EF	- \$25	\$25	X	F	-	\$10 EF
	887	219	75	-	-	-	EF	- \$25	\$25	X	F	-	\$10 EF
Montréal-Vancouver	914	459	50	1st Su	60	14	AB/14	NC	100%	X	2346	RT	-
	876	239	73	7	21	30	AB/14	AB 25%	25%	X	23	RT	-
	613	165	71	2	21	70	AB/14	AB 25%	25%	X	230P	RT	-

(Table C.7 cont'd.)

RESTRICTIONS

City Pair	Modal Full Fare \$	Lowest Non-Status Fare \$	Discount from Full Fare %	Length of Stay		Advance Booking	Ticket Purchase	Changes	Cancellation	Capacity Controlled	Applicability	Itinerary	Baggage
				Min:	Max:								
Regina-Toronto	564	309	45	1st Su	60	14	AB/14	NC	100%	X	-	RT NS	-
Houston-Las Vegas	239	146	39	2	21	30	AB/14	AB 25%	25%	X	230P	RT	-
Dallas-San Jose	667	183	73	7	21	30	AB/14	AB 25%	25%	X	23	RT	-

(Table C.7 cont'd.)

LEGEND

Length of Stay

Min

- 1st Su - first Sunday after departure
- 1st Sa - first Saturday after departure
- n - n days after departure.

Max

- n - n days
- n mo - n months.

Advance Booking

- n - n days before departure
- n hr. - n hours before departure.

Ticket Purchase

- AB - ticket must be purchased by close of advance booking period
- AB/n - ticket must be purchased by close of advance booking period, or n days after reservation, whichever is sooner
- EF - ticket purchase requirement on Eastern Airline's Contract Freighter Flights Fare:

WHEN RESERVATIONS ARE MADE:

More than 7 days before departure.

24 hr. through 7 days before departure.

Within 24 hr. of departure.

TICKETING TIME LIMIT WILL BE:

Within 48hr. after reservations are made.

Within 24 hr. after reservations are made.

No later than one hr. before departure.

Voluntary Changes (before departure and after issuance of ticket)

- \$n - service charge of \$n
- n% - service charge of n% of fare
- AB - advance booking restriction must be satisfied
- NC - no changes allowed
- AB/n% - advance booking restriction must be satisfied or service charge of n% will apply
- n% OD - service charge of n% applies if origin/destination changes
- n% R - service charge of n% applies for rerouting.

Voluntary Cancellation (before departure and after issuance of ticket)

- \$n - service charge of \$n
- n% - service charge of n% of fare.

Capacity Controlled

- X - seats are limited.

Applicability

- n1, n2, ... - applies on days n1, n2, ..., ns only (1=Monday, 2=Tuesday, ..., 7=Sunday)
- OP - applies in off-peak hours only
- F - applies on selected flights only.

Itinerary

- NS - applies on non-stop flights only
- MS - applies on multiple-stop flights only
- RT - return fare only
- SA - specified airport (in city pairs for which carrier flies to more than one airport).

Baggage

- \$n - charge of \$n per piece of checked baggage
- \$n EF - charge of \$n per piece of checked baggage subje + to space availability.

Sources: ATPCO Electronic Tariff, August 1, 1985.

ATPCO Passenger Tariff, August 7, 1985.

Airline Flight Schedules of People Express and Southwest Airlines.

PART D

OPERATING PERFORMANCE

SUMMARY

This part of the report reviews the operating and market characteristics of domestic unit toll services provided by Canadian air carriers. Information is presented by carrier level for Levels I to IV and by carrier for Level I.

Domestic passenger unit toll services represent more than 50% of each Level I carrier's total scheduled revenue passenger-kilometres (RPK's), with the exception of CP Air. Although total RPK's generated by domestic unit toll services increased in 1984 over the previous year, the domestic share of the total unit toll market declined slightly. This is largely due to the fact that the RPK's generated by CP Air's transborder and international unit toll services showed a larger increase than RPK's generated on its domestic unit toll services.

Average revenue or yield per RPK for all Level II carriers in both 1983 and 1984 are approximately two and one half times greater than that of Level I carriers. In 1984, RPK's of both Level I and II carriers increased while the average yield decreased by 0.8 cents for Level I carriers and 0.6 cents for Level II carriers. As for individual Level I carriers, Air Canada and Quebecair experienced relatively large declines in their average yields in 1984, while CP Air enjoyed a substantial rise. As a result, the average yield of CP Air for 1984 was fairly comparable with that of Air Canada. Air Canada experienced a 6% increase in domestic RPK's but a 16% decrease in average yield on domestic services, while CP Air enjoyed a 3% increase in domestic RPK's and a 6% increase in average yield on these services.

Average stage length for Level I carriers was approximately three and one half times that for Level II carriers. There was a slight decline in the average stage length in 1984 for both Level I and II carriers. In both 1983 and 1984, the average stage length and average yield for Level III carriers were comparable with the corresponding figures of Level II carriers. The average stage length of Level I carriers was approximately seven times that of Level IV carriers. The average yield of Level IV carriers was approximately four times that of the average yield of Level I carriers. While there was a marginal decline in the market share of domestic unit toll passenger services provided by Level I carriers in 1984, a slight increase was observed for Level II, III and IV carriers.

Following the historical pattern, the supply of domestic unit toll services remained highly concentrated. For example, six carriers controlled more than 90% of the domestic unit toll passenger services in 1983 and 1984. In 1984, a slight decline in the level of concentration was observed for passenger unit toll services.

Passenger traffic generated most of the domestic unit toll revenues for the Level I to IV carriers, accounting for 67% to 89% of total unit toll revenues.

The average yield for most Level I carriers varied between 10 and 20 cents, whereas the average yield for most Level II carriers fell between 20 and 30 cents. The average yields for most Levels III and IV carriers varied from 20 to 50 cents.

Level I carriers' average stage lengths varied from 302 to more than 1000 kilometres, while 90% of Level II to IV carriers operated over average distances less than 400 kilometres.

Level II carriers enjoyed substantial growth rates in their operations in 1984. Total RPK's rose by 24.9% and passenger revenues increased by 21.9%, with the result that the average yield decreased by 2.4%. Finally, a more favourable capacity utilization was observed for Level II carriers in 1984, as load factors improved considerably over those of 1983.

NOTES FOR TABLES D.1 TO D.9

Table D.1 shows the relative importance of domestic scheduled air passenger services by carrier for Level I carriers. Tables D.2 and D.3 summarize respectively the average yields and average stage lengths on domestic unit toll passenger services for Level I and II carriers, for 1983 and 1984.

Tables D.4.1 and D.4.2 provide a summary of operating and marketing activities in the domestic unit toll services market, by Level I, II, III and IV, as measured by revenue passenger-kilometres, revenues, average stage length and average yield on passenger services.

Tables D.5.1 and D.5.2 are included to show the degree of concentration in the domestic unit toll service market. Market concentration is measured here by the distribution among carriers of revenue passenger-kilometres, revenues derived from passenger services, and revenues derived from goods delivery services in the domestic unit toll operations.

Tables D.6 to D.8 include crosstabulations which summarize operating characteristics for domestic scheduled air services. Tables D.6.1 and D.6.2 show the number of carriers by passenger/cargo mix and by level in 1983 and 1984. Tables D.7.1 and D.7.2 show the number of carriers by average yield and by level for 1983 and 1984, and tables D.8.1 and D.8.2 show the number of carriers by average stage length and by level in 1983 and 1984.

Table D.9 provides a breakdown of the operating performance of Level II air carriers for such indicators as revenue passenger-kilometres, available seat-kilometres and load factors.

All 1984 figures in the following tables are based on preliminary data. Also, Section D includes only those Level I to IV carriers which participated in domestic scheduled unit toll services in 1983 or 1984. Finally, a complete description of Level I, II, III and IV air carrier classification criteria may be found in Statistics Canada Report No. 51-002.

Table D.1

THE RELATIVE IMPORTANCE OF DOMESTIC SCHEDULED PASSENGER
SERVICES AS A PORTION OF TOTAL SCHEDULED PASSENGER
SERVICES FOR ALL LEVEL I CARRIERS
(000's of Revenue Passenger-kilometres (RPK'S))

	1983			1984		
	Domestic ¹	Total ²	Domestic Share of Total RPK's (%)	Domestic	Total ³	Domestic Share of Total RPK's (%)
Air Canada	10 809 021	19 554 362	55.3	11 468 569	20 995 752	54.6
C.P. Air	3 865 470	9 159 088	42.2	3 982 062	10 232 852	38.9
PWA ⁴	1 438 911	1 438 911	100.0	1 419 347	1 419 347	100.0
Nordair ⁴	457 019	457 019	100.0	530 206	530 206	100.0
Quebecair	233 204	233 204	100.0	279 710	279 710	100.0
EPA	439 419	445 194	98.7	631 854	637 566	99.1
Total	<u>17 243 044</u>	<u>31 287 778</u>	<u>55.1</u>	<u>18 311 748</u>	<u>34 095 433</u>	<u>53.7</u>

Notes and Sources:

- 1) Domestic RPK data for 1983 and 1984 are based on air carrier statements filed with the Air Transport Committee.
- 2) Total RPK data for 1983 are from "Air Carrier Operations in Canada", Aviation Statistics Centre.
- 3) Total RPK data for 1984 are from "Canadian Level I Air Carriers, Industry Analysis 1984", Air Services Analysis Branch, Air Transport Committee.
- 4) A small portion of transborder routes for PWA and Nordair were treated as domestic services to be consistent with previous publications.

Table D.2

AVERAGE YIELDS ON DOMESTIC UNIT TOLL PASSENGER SERVICES
FOR LEVEL I AND II CARRIERS

	Average Yield (in Cents/RPK)		Change (¢) 1983-1984
	<u>1983</u>	<u>1984</u>	
<u>LEVEL I</u>			
Air Canada	10.2	8.6	-1.6
CP Air	8.2	8.7	+0.5
PWA	15.6	15.7	+0.1
Nordair	14.4	14.7	+0.3
Quebecair	20.3	19.2	-1.1
EPA	13.8	13.4	-0.4
<u>ALL LEVEL I CARRIERS</u>	10.5	9.7	-0.8
<u>ALL LEVEL II CARRIERS</u>	25.3	24.7	-0.6

Source: Air carrier statements filed with the Air Transport Committee.

Table D.3

AVERAGE STAGE LENGTH ON DOMESTIC UNIT TOLL
PASSENGER SERVICES FOR LEVEL I AND II CARRIERS

	Average Stage Length (Kilometres)		% Change (1983-1984)
	1983	1984	
<u>LEVEL I</u>			
Air Canada	971.1	962.7	-0.9
CP Air	1 067.4	1 111.8	+4.2
PWA	390.6	399.0	+2.2
Nordair	535.4	531.3	-0.8
Quebecair	322.0	302.3	-6.1
EPA	440.2	444.0	+0.9
<u>ALL LEVEL I CARRIERS</u>	742.6	737.2	-0.7
<u>ALL LEVEL II CARRIERS</u>	221.4	210.5	-4.9

Source: Air carrier statements filed with the Air Transport Committee.

Table D.4.1
MARKET ANALYSIS OF DOMESTIC UNIT TOLL SERVICES IN 1983

Level	No. of Carriers	RPK's (¹ 000)	%	Passenger Revenues (\$000)	%	Goods Revenues (\$000)	%	Average Stage Length ¹ (kilometres)	Average Yield ² (¢)
I	6	17 243 044	97.6	1 815 448	94.4	227 110	86.4	742.6	10.5
II	8	255 885	1.4	64 623	3.4	19 905	7.6	221.4	25.3
III	35	152 020	0.9	38 982	2.0	15 085	5.7	193.5	25.6
IV	33	11 734	0.1	4 582	0.2	749	0.3	100.0	39.0
Total	82 ³	17 662 683		1 923 635		262 849		475.4	10.9

Table D.4.2
MARKET ANALYSIS OF DOMESTIC UNIT TOLL SERVICE IN 1984

Level	No. of Carriers	RPK's (¹ 000)	%	Passenger Revenues (\$000)	%	Goods Revenues (\$000)	%	Average Stage Length ¹ (kilometres)	Average Yield ² (¢)
I	6	18 311 749	97.2	1 770 356	93.1	240 554	85.5	737.2	9.7
II	8	319 659	1.7	78 794	4.1	17 682	6.3	210.5	24.7
III	35	188 668	1.0	45 308	2.4	21 891	7.8	196.0	24.0
IV	33	15 952	0.1	6 881	0.4	1 071	0.4	110.0	43.1
Total	82 ³	18 836 028		1 901 339		281 198		456.7	10.1

Notes: 1) Average stage length = kilometres flown/no. of departures.

2) Average yield = domestic passenger revenues/domestic RPK.

3) Only those carriers who participated in domestic scheduled unit toll services in 1983 and 1984 are included in the above tables.

Sources: a) Revenue data for Levels I and II were provided by the Air Transport Committee.

b) All other operating data for Levels I and II were taken from Statement 10 filed with the Air Transport Committee.

c) Level III and IV data were provided by the Aviation Statistics Centre.

Table D.5.1

CONCENTRATION OF DOMESTIC
UNIT TOLL SERVICES IN 1983*

Controlled by the top:	% Concentration - (measured in terms of)		
	Revenue Passenger- kilometres	Passenger Revenues	Goods Revenues
2 carriers	83.1	73.8	64.8
4 carriers	93.8	88.8	81.9
6 carriers	97.6	94.4	88.7
8 carriers	98.4	95.9	91.9
10 carriers	98.8	96.9	94.4
12 carriers	99.0	97.5	95.9
14 carriers	99.2	97.9	96.8
16 carriers	99.3	98.3	97.5
18 carriers	99.4	98.5	98.1
20 carriers	99.5	98.7	98.7

Note: * Subsidiaries were treated as independent companies in Tables D.5.1 and D.5.2, and their operating statistics were excluded from those of the parent companies.

Sources: a) Revenue data for Levels I and II were provided by the Air Transport Committee.
b) RPK's for Levels I and II were taken from air carrier statements filed with the Air Transport Committee.
c) Level III and IV data were provided by the Aviation Statistics Centre.

Table D.5.2

CONCENTRATION OF DOMESTIC
UNIT TOLL SERVICES IN 1984

Controlled by the top:	% Concentration - (measured in terms of)		
	Revenue Passenger- kilometres	Passenger Revenues	Goods Revenues
2 carriers	82.0	70.0	65.1
4 carriers	92.9	86.2	80.9
6 carriers	97.2	93.1	86.2
8 carriers	98.1	94.9	90.2
10 carriers	98.6	96.4	93.5
12 carriers	98.9	97.0	95.4
14 carriers	99.1	97.4	96.7
16 carriers	99.2	97.8	97.5
18 carriers	99.4	98.2	98.2
20 carriers	99.5	98.4	98.7

- Sources:
- a) Revenue data for Levels I and II were provided by the Air Transport Committee.
 - b) RPK's for Levels I and II were taken from air carrier statements filed with the Air Transport Committee.
 - c) Level III and IV data were provided by the Aviation Statistics Centre.

Table D.6.1

NUMBER OF DOMESTIC SCHEDULED CARRIERS BY LEVEL AND
BY PASSENGER/CARGO MIX IN 1983

Level	Scheduled Passenger Revenues as % of Total Unit Toll Revenues							Total
	0-30	30.01-50	50.01-60	60.01-70	70.01-80	80.01-90	90.01+	
I	0	0	0	0	1	3	2	6
II	0	1	0	1	2	1	3	8
III	1	4	3	4	3	2	18	35
IV	<u>3</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>6</u>	<u>21</u>	<u>33</u>
Total	4	6	3	6	7	12	44	82

Table D.6.2

NUMBER OF DOMESTIC SCHEDULED CARRIERS BY LEVEL AND
BY PASSENGER/CARGO MIX IN 1984

Level	Scheduled Passenger Revenues as % of Total Unit Toll Revenues							Total
	0-30	30.01-50	50.01-60	60.01-70	70.01-80	80.01-90	90.01+	
I	0	0	0	0	1	1	4	6
II	0	1	0	2	1	1	3	8
III	2	5	1	4	2	2	19	35
IV	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>5</u>	<u>22</u>	<u>33</u>
Total	4	6	2	7	6	9	48	82

Sources: Air Transport Committee.
Aviation Statistics Centre.

Table D.7.1

NUMBER OF DOMESTIC SCHEDULED CARRIERS BY LEVEL AND BY
AVERAGE YIELD IN 1983

Level	Average Yield (Cents per RPK)											N.A.*	Total
	0-10	10.01-20	20.01-30	30.01-40	40.01-50	50.01-60	60.1-70	70.01-80	80.01-90	90.01-100	100.01+		
I	1	4	1	0	0	0	0	0	0	0	0	0	6
II	0	1	4	1	1	0	1	0	0	0	0	0	8
III	0	4	12	9	6	0	0	1	0	0	2	1	35
IV	<u>0</u>	<u>2</u>	<u>8</u>	<u>6</u>	<u>- 6</u>	<u>5</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>33</u>
Total	1	11	25	16	13	5	3	3	1	0	3	1	82

Table D.7.2

NUMBER OF DOMESTIC SCHEDULED CARRIERS BY LEVEL AND BY
AVERAGE YIELD IN 1984

Level	Average Yield (Cents per RPK)											N.A.*	Total
	0-10	10.01-20	20.01-30	30.01-40	40.01-50	50.01-60	60.1-70	70.01-80	80.01-90	90.01-100	100.01+		
I	2	4	0	0	0	0	0	0	0	0	0	0	6
II	0	1	4	2	0	1	0	0	0	0	0	0	8
III	0	6	10	11	5	1	0	0	0	0	1	1	35
IV	<u>0</u>	<u>3</u>	<u>10</u>	<u>7</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>33</u>
Total	2	14	24	20	7	6	1	2	0	0	5	1	82

Note: * No unit toll passenger services were provided.

Sources: Air Transport Committee.
Aviation Statistics Centre.

Table D.8.1

NUMBER OF DOMESTIC SCHEDULED CARRIERS BY LEVEL AND
BY AVERAGE STAGE LENGTH IN 1983

Level	Average Stage Length (Kilometres)											Total
	0-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001+	
I	0	0	0	2	1	1	0	0	0	1	1	6
II	0	2	5	0	0	0	0	1	0	0	0	8
III	6	11	11	4	0	1	1	0	0	0	1	35
IV	<u>17</u>	<u>7</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>33</u>
Total	23	20	19	10	2	2	1	1	1	1	2	82

Table D.8.2

NUMBER OF DOMESTIC SCHEDULED CARRIERS BY LEVEL AND
BY AVERAGE STAGE LENGTH IN 1984

Level	Average Stage Length (Kilometres)											Total
	0-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001+	
I	0	0	0	2	1	1	0	0	0	1	1	6
II	0	2	5	0	0	0	0	1	0	0	0	8
3	6	8	13	6	1	1	0	0	0	0	0	35
4	<u>13</u>	<u>8</u>	<u>5</u>	<u>2</u>	<u>5</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>33</u>
total	19	18	23	10	7	2	0	1	0	1	1	82

Sources: Air Transport Committee.
Aviation Statistics Centre.

PART E

O C C A S I O N A L P A P E R S

This part of the report provides a forum to report on the results of work carried out within the Research Branch as well as on trends and developments which may be of particular interest to the consideration of competition and regulation in the Canadian air transport industry.

The present paper uses the concept of the hub to analyze changes in the air transport industry. The first section of the paper defines a hub classification for Canadian communities and compares it to the American one. The second and third sections illustrate how the hub classification can be used to analyse services and pricing in the air transport industry.

A CLASSIFICATION OF HUBS FOR CANADA
by Michel Roland¹

For a year now, the Air Transport Monitor has been presenting information in a structured manner on various aspects of the air industry in Canada to help the industry itself and observers to evaluate trends. To do this, it has been essential to identify factors that can bring to light and explain trends with respect to markets, airports and carriers. Distance, volume of traffic and geographic sector are three explanatory factors used to monitor such trends.

This article introduces into the Air Transport Monitor an additional concept that will serve to carry further the analysis of changes in the air transport industry. It is the hub concept, which will assist in classifying cities with airports according to the level of traffic they generate. The concept was used in the United States to identify the modifications in services offered to different communities since deregulation. It can also serve to monitor trends in the competitive structure of markets or to study the differences in revenue generated by various services.

The first section of the article defines for Canada a classification of communities based on the hub concept and compares it with the American classification. The second and third sections illustrate how the classification can be used to analyse services and pricing with data from sources already used for the tables in the Air Transport Monitor.

It should be noted that the definition of hub presented in this article is different from that widely used with respect to the network of a particular carrier. In the network of a given carrier, hub refers to the airport used as a connecting centre to which passengers from all points of origin are flown to make connections to their final destinations. A carrier's network operated according to this principle is called a hub and spoke network. The definition of hub proposed in this article refers to all air transport activities at a particular city, not only to the activities of a particular carrier. However, the fact that one or more carriers choose a certain city as a main connection point means that that city is likely to attract a significant portion of national traffic. Consequently, the two definitions of hub cannot be kept completely separate.

1. Hubs

Within the context of a national air transport system, a hub represents a city, served by one or more airports, which generates a significant volume of air traffic. This definition is basically relative, because volume of traffic is measured in relation to total activity in the system. The concept of hub therefore proposes a classification of cities according to the volume of traffic handled by each one. This section presents such a classification for Canada.

The guiding principle in establishing a classification was to facilitate comparisons with American categories of hubs as defined by the

Civil Aeronautics Board, the former American air transport regulatory agency. Following the example of the United States, the number of enplanements was used as a measure of traffic, and cities with airports were then grouped into various hub categories according to the percentage of passengers who enplaned at each of the cities in relation to the whole system. The percentages delimiting the categories were chosen so that the resultant classification would be identical to the one that would be obtained by applying the American definition of hub category to Canadian data, that is, by considering Canada as an extension of the American market.

Such rules make it possible to define hub categories for Canada. Thus, a large hub is a city that accounts for 20.0% or more of all enplanements.² The enplanements considered are those made at Canadian cities included in the Aviation Statistics Centre's Daily Airport Activities Report for domestic and transborder unit toll services. A medium hub is one that accounts for 2.0 to 20.0% (lower limit included) of enplanements, and a small hub is one that accounts for 0.45 to 2.0% (lower limit included). Any city that does not meet these criteria is not considered a hub and is designated as "other". International enplanements were excluded because the classification of hubs will be used mainly to study trends in air transport in a liberalized environment and the international sector has not moved significantly toward liberalization.

This definition of hub category is a dynamic classification, since cities may change category over the years depending on their participation in the overall growth of traffic. The classification based on 1983 figures is given in Table E.1.

Of the 204 communities which, according to the Official Airline Guide, received air services in 1983, 0.5% can be classified as large hubs, 3.4% as medium hubs and 4.9% as small hubs. When communities in the southern sector³ only are taken into account, the percentages are 1.0, 7.1 and 10.2, respectively. By comparison, 3.4% of American communities (excluding cities in Alaska and Hawaii) are large hubs, 5.2%, medium, and 8.3%, small hubs. A comparison between Canada's southern sector and the United States thus shows that there are relatively more large hubs and less medium and small hubs in the United States. On the basis of 1982 data, the average number of enplanements per city in Canada was 5.95 million⁴ for large hubs, 1.70 million for medium hubs and 0.21 million for small hubs, compared with 8.22, 1.47 and 0.31 million, respectively, in the United States.

2. Recent Trends in Services Seen from the Point of View of Hubs⁵

This section describes one possible use of the hub concept as a tool for the analysis of the evolution of the Canadian air transport industry. Data from the Official Airline Guide, which is the source of the tables in Part B of the Air Transport Monitor, were organized according to the hub classification to examine recent trends in scheduled air service in Canada.

Table E.2 shows the number of domestic departures and seats in the southern sector for the week of August 15 to 21 in the years 1983 to 1985 by hub category. This is simply a compilation of the data reported in Tables of

Table E.1

HUBS AND PERCENTAGES OF ENPLANEMENTS
1983
(percentage of enplanements in parentheses)

Large Hub	Medium Hubs	Small Hubs
Toronto (26.52)	Vancouver (13.26)	Regina (1.34)
	Montréal (12.40)	Saskatoon (1.28)
	Calgary (8.43)	Victoria (1.21)
	Edmonton (6.19)	Québec (1.18)
	Winnipeg (4.73)	St. John's (1.12)
	Ottawa (4.54)	Thunder Bay (0.96)
	Halifax (3.21)	Kelowna (0.81)
		Prince George (0.54)
		London (0.48)
		Moncton (0.48)

Notes: 1. The percentages of enplanements have been calculated in relation to the total number of enplanements in the domestic and transborder sectors recorded at the 111 airports served in 1983 by the carriers covered in the Daily Airport Activity Report.

2. The following communities have on their territory more than one airport:

Toronto (Lester B. Pearson, Buttonville, Toronto Island)
Vancouver (Vancouver International, Vancouver Harbour)
Montréal (Dorval, Mirabel)
Edmonton (Edmonton International, Edmonton Municipal)
Victoria (Victoria International, Victoria Harbour)

However, percentages presented in this table exclude Buttonville, Toronto Island, Vancouver Harbour and Victoria Harbour because these airports are not part of the 111 airports mentioned above. The following tables will include activities at these airports.

Table E.2

SCHEDULED CARRIER ACTIVITY
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUGUST 15 TO 21

<u>Hubs</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
1983						
Large	780	112 015	147	4 379	927	116 394
Medium	2 366	300 381	629	19 798	2 995	320 179
Small	634	72 293	328	10 265	962	82 558
Other	759	83 935	1 259	29 366	2 018	113 301
Total	4 539	568 624	2 363	63 808	6 902	632 432
1984						
Large	817	118 079	165	4 661	982	122 740
Medium	2 342	308 225	703	24 736	3 045	332 961
Small	603	69 136	471	16 794	1 074	85 930
Other	780	86 056	1 456	36 710	2 236	122 766
Total	4 542	581 496	2 795	82 901	7 337	664 397
1985						
Large	919	127 750	297	9 744	1 216	137 494
Medium	2 597	332 831	1 142	36 864	3 739	369 695
Small	671	79 306	667	21 618	1 338	100 924
Other	812	93 092	1 844	44 863	2 656	137 955
Total	4 999	632 979	3 950	113 089	8 949	746 068

Source: Air Transport Monitor, Volume 1, Number 1 (January 1985) and
Volume 2, Number 1 (January 1986).

Part B published in the Air Transport Monitor, Volume 1, Number 1 and Volume 2, Number 1. The data in Table E.2 are then used to calculate the growth rate of departures and seats (Table E.3), the average number of seats per departure (Table E.4) and the percentage of total activity accounted for by the cities in each category (Table E.5). These data are of special interest because they cover periods immediately preceeding or following the announcement of the New Canadian Air Policy and the Freedom to Move⁶ document on transport policy reform.

Table E.3 shows that the number of departures and seats for jet services rose only slightly between 1983 and 1984 (departures by 0.07% and seats by 2.26%), presumably because the air transport industry was still suffering from the effects of the recession and was just barely on the way to recovery. Indeed, medium and small hubs saw jet departures and, in the second case, seats available for these departures, decline. However, such drops were more than compensated for by a significant increase in non-jet service, with the result that all categories of cities showed an increase in services over the period. There was strong growth in all categories between 1984 and 1985, marking the fact that the air transport industry had moved out of the recession.

As shown in Table E.4, the strong growth in non-jet services between 1983 and 1985 led to a drop in the average number of seats per departure (83 in 1985, compared with 92 in 1983), jet departures having the same average number of seats in 1985 (127) and in 1983 (125). The data for the years covered by this table do not reveal any trends within hub categories. However, in every year, it seems that the number of seats per departure, which is a measure of the average size of aircraft used, increases when the hub category represents cities with higher traffic. A concentration of air transport activities seems to lead carriers to use aircraft with greater capacity so as to reduce unit operating costs.

In spite of the differences, noted from Table E.3, in growth rates of services at cities in different categories, the relative size of the categories has remained very stable over the past number of years, as shown in Table E.5. From 1983 to 1985, hubs have increased their share of non-jet services, mainly at the expense of the "other" category, but the increase has been too small to affect the overall results of activities in the southern domestic sector. Since there continues to be a generally strong correlation between the number of departures and seats and the number of enplanements, the table suggests that the hub classification will remain basically the same in 1984 and 1985 as presented earlier in Section 1 for 1983.

It is difficult to interpret the data on growth rates without first removing the influence of economic fluctuations. One possible way is to examine changes in market structure. For example, the number of firms in a market is considered to have an impact on the quantity of services offered and varies less with economic fluctuations than the services as such, because the decision to enter or leave a market takes into account a longer term than the decision to increase or decrease the number of flights. Observing trends in the number of firms, therefore, is an indirect method of evaluating trends in the supply of services. Table E.6 gives the percentage of city pairs for each hub category served by a single carrier on a non-stop service.⁷ This

Table E.3

GROWTH RATE OF SCHEDULED CARRIER ACTIVITY
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUGUST 15 TO 21
(Percentage)

<u>Hubs</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
1983-1984						
Large	+4.74	+5.41	+12.24	+6.44	+5.93	+5.45
Medium	-1.01	+2.61	+11.76	+24.94	+1.67	+3.99
Small	-4.89	-4.37	+43.60	+63.60	+11.64	+4.08
Other	+2.77	+2.53	+15.65	+25.01	+10.80	+8.35
Total	+0.07	+2.26	+18.28	+29.92	+6.30	+5.05
1984-1985						
Large	+12.48	+8.19	+80.00	+109.05	+23.83	+12.02
Medium	+10.89	+7.98	+62.45	+49.03	+22.79	+11.03
Small	+11.28	+14.71	+41.61	+28.72	+24.58	+17.45
Other	+4.10	+8.18	+26.65	+22.21	+18.78	+12.37
Total	+10.06	+8.85	+41.32	+36.41	+21.97	+12.29
1983-1985						
Large	+17.82	+14.05	+102.04	+122.52	+31.18	+18.13
Medium	+9.76	+10.80	+81.56	+86.20	+24.84	+15.47
Small	+5.84	+9.70	+103.35	+110.60	+39.09	+22.25
Other	+6.98	+10.91	+46.47	+52.77	+31.62	+21.76
Total	+10.13	+11.32	+67.16	+77.23	+29.66	+17.97

Source: Calculated on the basis of Table E.2.

Table E.4

AVERAGE NUMBER OF SEATS PER DEPARTURE
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUGUST 15 TO 21

<u>Hubs</u>	<u>Jet</u>	<u>Non-Jet</u>	<u>Total</u>
1983			
Large	144	30	126
Medium	127	31	107
Small	114	31	86
Other	111	23	56
Total	125	27	92
1984			
Large	145	28	125
Medium	132	35	109
Small	115	36	80
Other	110	25	55
Total	128	30	91
1985			
Large	139	33	113
Medium	128	32	99
Small	118	32	75
Other	115	24	52
Total	127	29	83

Source: Calculated on the basis of Table E.2.

Table E.5

PERCENTAGE OF SCHEDULED CARRIER ACTIVITY IN HUBS
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUGUST 15 TO 21
(Percentage)

<u>Hubs</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
1983						
Large	17.2	19.7	6.2	6.9	13.4	18.4
Medium	52.1	52.8	26.6	31.0	43.4	50.6
Small	14.0	12.7	13.9	16.1	13.9	13.1
Other	16.7	14.8	53.3	46.0	29.2	17.9
1984						
Large	18.0	20.3	5.9	5.6	13.4	18.5
Medium	51.6	53.0	25.2	29.8	41.5	50.1
Small	13.3	11.9	16.9	20.3	14.6	12.9
Other	17.2	14.8	52.1	44.3	30.5	18.5
1985						
Large	18.4	20.2	7.5	8.6	13.6	18.4
Medium	52.0	52.6	28.9	32.6	41.8	49.6
Small	13.4	12.5	16.9	19.1	15.0	13.5
Other	16.2	14.7	46.7	39.7	29.7	18.5

Source: Calculated on the basis of Table E.2.

Table E.6

PROPORTION OF LINKS PROVIDED BY
A SINGLE CARRIER
SOUTHERN DOMESTIC SECTOR
FOR WEEK OF AUGUST 15 TO 21

<u>Hubs</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Large	0.69	0.59	0.50
Medium	0.69	0.65	0.63
Small	0.77	0.76	0.70
Other	0.91	0.86	0.81
Total	0.81	0.78	0.73

Source: Calculated on the basis of the Official Airline Guide.

table reveals two facts. First, the percentage of city pairs served by a single carrier is higher in categories of smaller traffic. Second, this percentage dropped between 1983 and 1985 in all categories, with the result that the average for the whole sector dropped from 81 to 73%. This shows a positive step towards greater choice for the users of air services in Canada.

3. Fares From a Hub Perspective

From the tables within the previous section, it is possible to note some sort of relationship between the aircraft type being used to serve the various cities and the classification of cities within the hub categories. Because differences in aircraft types translate into operating cost differences, the relationship previously identified suggests that service costs vary among cities according to their classification within the hub categories. Assuming that fares truly reflect costs, any cost differences should impact on fare levels, implying a potential relationship between hub categories and fares. This section verifies whether or not this assumed relationship is supported by available data.

The data used in this section are drawn from the Fare Basis Survey. Some of the survey results are published in Part C of the Air Transport Monitor, and the methodology of the survey is explained in detail in Part E of the previous issue (Volume 1, Number 4, October 1985). The survey gathers data used to estimate volume of traffic and pricing by passenger origin and destination as shown on the coupons issued by Level I carriers (a coupon's origin and destination are the points at which the passenger enplanes and deplanes during the time that the coupon is valid).⁸ In particular, the survey provides estimates of revenue per passenger-kilometre, a measure commonly used to approximate price level.

Table E.7 shows revenue per passenger-kilometre in 1983 and 1984 derived from the compilation of coupons grouped according to the hub classification. The figure corresponding to the 'large hub' row and 'medium hub' column is the revenue per passenger-kilometre for coupons with a large and medium hub as origin and destination respectively. Because the survey does not take into account the direction of flights, the table is symmetrical and only the upper part is shown here. Because only one city is included in the large hub category, there is obviously no coupon with a large hub as both origin and destination. Finally, unlike the tables in the preceding section, this table includes in the "other" category, cities in the northern sector.

In 1983, revenue per passenger-kilometre increases (or stays constant) as the destination hub size decreases within any given hub category. However, the 1984 data do not support such a finding. Therefore, the data does not allow the verification of the existence of a relationship between hub categories and fares.

Such results must be interpreted with caution. Despite the fact that the relative importance of traffic constitutes the basis for classifying hubs, not having verified the existence of a relationship between hubs and fares does not exclude the possibility of a relationship between revenue per passenger-kilometre and traffic volume. Revenue per passenger-kilometre can

Table E.7

REVENUE PER PASSENGER-KILOMETRE
LEVEL I CARRIERS
DOMESTIC SECTOR
(cents)

<u>Hubs</u>	<u>Medium</u>	<u>Small</u>	<u>Other</u>
<u>1983</u>			
Large	9.2	9.2	13.7
Medium	10.0	13.8	15.7
Small		14.2	19.8
Other			20.6

Average: 10.6

<u>Hubs</u>	<u>Medium</u>	<u>Small</u>	<u>Other</u>
<u>1984</u>			
Large	9.5	9.2	13.6
Medium	10.2	13.5	15.9
Small		12.9	19.7
Other			20.4

Average: 10.7

Source: Calculated on the basis of the Official Airline Guide.

be a function of some other factors, such as distance flown and market concentration, and variations in these factors, rather than in traffic, and this could explain the results obtained for revenue per passenger-kilometre. The problem stems from the fact that other market characteristics, beside traffic level, are not necessarily homogeneous among hub categories and, consequently, it becomes impossible to isolate the independent effects on fares of traffic levels from the effects of other market characteristics.

4. Conclusion

The use of hub categories to aggregate data on services and fares made it possible, (1) to study in a new light recent changes in the quantity and type of air services offered, (2) to monitor trends in the relative share of traffic of communities of different sizes in the national air transport system, and (3) to establish relations between the hub category and two independent factors, namely, type of aircraft used and percentage of links from or to a particular city provided by a single carrier. In addition, the hub classification makes it possible to make comparisons between the American and Canadian networks. These simple examples, based on data sources which already have been used to generate tables published in the Air Transport Monitor, demonstrate the usefulness of the hub concept in analysing the air transport industry.

FOOTNOTES

¹ The author is an economist with Passenger Transport Studies, Research Branch. Useful comments were provided by Dan Laprade and Roger Roy, also of Passenger Transport Studies. However, the opinions expressed in this article are strictly those of the author and do not necessarily reflect those of the Canadian Transport Commission.

² Enplanements are estimated on the basis of the Daily Airport Activity Report and the System Passenger Origin and Destination Report that carriers submit to the Air Transport Committee.

³ Southern sector has been defined in Part B of this issue.

⁴ To make data comparable with available American data, the enplanements mentioned in this paragraph include enplanements on international flights as well as those on domestic and transborder flights. Buttonville, Toronto Island, Victoria Harbour and Vancouver Harbour are not included in these calculations.

⁵ The author would like to thank Mr. Eric Mainville, Passenger Transport Studies, Research Branch, for providing the data for this section. The author, however, remains fully responsible for any error that may have occurred during the processing of the data and made its way into the text.

⁶ Government of Canada, Freedom to Move: a Framework for Transportation Reform, Ottawa, July 1985.

⁷ Unlike the preceding tables, Table E.6 does not include data on intra-metropolitan services, that is, services between two airports at the same city, such as Dorval and Mirabel at Montréal.

⁸ Quebecair did not take part in the survey in 1983 and 1984, the years for which results are given in this section. Another point to note is that Level I carriers are only a subgroup of Canadian airline companies taken into account in the data in the previous section.

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INTRODUCTION

The Air Transport Monitor is prepared by staff of the Passenger Transport Studies and Economic and Social Research Directorates of the Research Branch of the Canadian Transport Commission. It is undertaken with the intent of collecting and disseminating information on service levels, air fares, and air carrier operations as may be of assistance to the consideration of competition and regulation in the Canadian air transport industry.

Beginning with the current issue, the Air Transport Monitor will have a new format. The objective is to provide the reader with a concise discussion of changes which are taking place in the air transport market in Canada. To this end, the length of the Air Transport Monitor has been considerably shortened and more emphasis is being devoted to analyzing trends and highlighting developments in the Canadian air transport industry during the quarter under study. The present and future issues of the report will consist of three parts.

Part I, "Overview of the Canadian Air Industry", presents a broad snapshot of the industry by providing information on traffic, capacity, prices and operating performance.

Part II, "Market Analysis", presents a detailed examination of scheduled services and prices in a specific domestic market. For this purpose, Canada will be divided into five distinct geographic regions, namely, Atlantic, Central (Québec and Ontario), Prairies, Pacific (British Columbia) and Northern. Each issue will focus on one or two of these regions.

Part III, "Special Features", will report on the results of work carried out within the Research Branch as well as on topics which may be of particular interest to the consideration of competition and regulation in the Canadian air transport industry.

All Aviation Statistics Centre (ASC) data not yet published by the ASC should be considered preliminary and may be revised in future issues. Questions pertaining to any aspect of the report or comments regarding possible additional topics which might be included in future issues should be addressed to Sheila Rajani, Canadian Transport Commission, Ottawa, Ontario K1A 0N9 or telephone (819) 997-2830.

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PART I

OVERVIEW OF THE CANADIAN AIR INDUSTRY

This part of the report presents a broad overview of the airline industry in Canada. Part I is divided into three separate sections. The first section provides quarterly data for 1984 and the first three quarters of 1985 on the scheduled and charter operations of Level I carriers in the domestic, transborder and international markets. The second section presents a summary of scheduled carrier activity in terms of the number of seats and departures offered by these carriers as well as a discussion of major changes in services. The third and final section presents a discussion of domestic air fare indices for both economy and discounted fares.

OPERATING PERFORMANCE

This section of the report focuses on general indicators of operating performance for Level I* Canadian air carriers in the domestic, transborder and international markets. In this issue, information on scheduled and charter activities is provided on a quarterly basis for 1984 and 1985. Data on passenger revenues, traffic, capacity utilization and average revenue or yield (cents per RPK) are presented for scheduled air services in Tables 1.1 to 1.3 for each of the three markets stated above. Table 1.4 provides a quarterly view of total scheduled air activities. Charter passenger data depicted by carrier in Tables 1.5 to 1.8 is presented also both on a market basis and on a total system basis.

Scheduled Air Services

A comparison of operating performance for scheduled activities (Table 1.4) in the first three quarters of 1984 with the same three quarters in 1985 reveals overall increases in passenger revenues, revenue passenger-kilometres (RPK's) and yields. RPK's rose by 5.5% while passenger revenues increased by 9.5% resulting in a 0.3¢ increase in average yield. Available seat-kilometres (ASK's) increased at a slightly higher rate (7.8%) than RPK's, resulting in a marginally lower load factor**; 66.6% in 1985 compared to 68.1% in 1984.

Larger increases in passenger revenues and RPK's for total scheduled activities were observed in the first and second quarters, while the third quarter, as has been the case historically, continued to represent the highest passenger traffic volume and revenue. The traditional higher passenger revenues and higher passenger traffic (RPK's) in the third quarter produced again both in 1984 and 1985, marginally lower third quarter yields than the yields of the first two quarters. This occurred despite substantially higher load factors during the third quarters of both years.

An examination of scheduled passenger revenues generated in each of the three markets in 1984 and 1985 shows the domestic market being responsible for the largest portion of the total revenues, with an approximate share of 62%, followed by the international market at 25% and transborder at 13%. The domestic market also showed the highest percentage of the total scheduled system RPK's with 53% compared to 34% for the international market and 13% for transborder activities.

A comparison of yields and load factors for the first three quarters of 1984 and 1985 shows the domestic market yield increasing and load factor experiencing a small decline in 1985. The international market's load factor increased slightly in 1985 while yields remained relatively constant. The yield and load factor in the transborder market increased marginally in

* Level I carriers include: Air Canada, CP Air, Pacific Western Airlines, Nordair, Quebecair, Eastern Provincial Airways and Wardair (charter).

** Load factor = revenue passenger-kilometres/available seat-kilometres.

Table 1.1

DOMESTIC SCHEDULED AIR SERVICES
LEVEL I CARRIERS
1984-1985

	Passenger Revenues		Revenue Passenger-kilometres		Yield (Cents/RPK)		Load Factor*	
	1984 (\$000)	1985 (\$000)	% Change	1984 ('000)	1985 ('000)	% Change	1984 %	1985 %
First Quarter	421 165	454 705	+8.0	3 763 999	3 951 210	+5.0	58.9	58.1
Second Quarter	501 639	553 864	+10.4	4 749 461	4 871 189	+2.6	68.7	63.9
Third Quarter	551 767	592 542	+7.4	5 506 721	5 446 153	-1.1	72.1	65.7
Fourth Quarter	471 154	..	..	4 281 772	..	..	61.4	..
Annual TotalR	1 945 725	..	..	18 301 953	..	..	65.6	..

Notes: R - Data has been revised from Air Transport Monitor, Volume 2, Number 1 (January 1986).

* Available seat-kilometres were estimated for one carrier in order to calculate load factor.

Data are preliminary.

.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.2

TRANSBORDER SCHEDULED AIR SERVICES
LEVEL I CARRIERS
1984-1985

	Passenger Revenues		Revenue Passenger-kilometres		Yield (Cents/RPK)		Load Factor*	
	1984 (\$000)	1985 (\$000)	% Change	1984 ('000)	1985 ('000)	% Change	1984 %	1985 %
First Quarter	101 387	106 536	+5.1	1 279 186	1 230 404	-3.8	60.4	63.8
Second Quarter	100 029	105 129	+5.1	1 138 926	1 055 519	-7.3	61.2	59.9
Third Quarter	104 623	110 338	+5.5	1 062 578	1 073 098	+1.0	61.1	64.5
Fourth Quarter	92 870	..	..	1 135 426	..	..	63.6	..
Annual Total	398 909	..	..	4 616 116	..	..	61.5	..

Notes: Data are preliminary.

.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.3

INTERNATIONAL SCHEDULED AIR SERVICES
LEVEL I CARRIERS
1984-1985

	Passenger Revenues		Revenue Passenger-kilometres		Yield (Cents/RPK)		Load Factor*	
	1984 (\$000)	1985 (\$000)	% Change	1984 ('000)	1985 ('000)	% Change	1984 %	1985 %
First Quarter	136 929	164 642	+20.2	2 006 708	2 636 588	+31.4	64.8	72.1
Second Quarter	195 096	228 177	+17.0	2 862 535	3 307 057	+15.5	73.3	73.8
Third Quarter	266 967	290 114	+8.7	3 895 062	4 135 633	+6.2	79.5	76.9
Fourth Quarter	154 606	..	..	2 302 110	..	..	67.3	..
Annual Total	753 598	..	..	11 066 415	..	..	72.2	..

Notes: Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.4

TOTAL* SCHEDULED AIR SERVICES
LEVEL I CARRIERS
1984-1985

	Passenger Revenues		Revenue Passenger-kilometres		Yield (Cents/RPK)		Load Factor*	
	1984 (\$000)	1985 (\$000)	% Change	1984 ('000)	1985 ('000)	% Change	1984 %	1985 %
First Quarter	659 481	725 883	+10.1	7 049 893	7 818 202	+10.9	60.8	63.2
Second Quarter	796 764	887 170	+11.3	8 750 922	9 233 765	+5.5	69.0	66.6
Third Quarter	923 357	992 994	+7.5	10 464 361	10 654 884	+1.8	73.3	69.5
Fourth Quarter	718 630	..	..	7 719 308	..	..	63.4	..
Annual Total	3 098 232	..	..	33 984 484	..	..	67.0	..

Notes: * Includes domestic, transborder and international scheduled air services.
Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

1985. The international market showed the highest load factors in both years, followed by the domestic and transborder markets.

Following the traditional inverse relationship between average yields and average stage lengths*, domestic services, with the shortest average stage length showed the highest average yield of the three markets in both 1984 and 1985. The international market, with the longest average stage length produced the lowest average yield, while the average stage length and hence the yield for transborder services was the median of the three markets.

A market comparison of passenger revenue and RPK percentage changes over the first three quarters of 1984 and 1985 shows the international market with the highest rate of increase; 14% and 15% respectively, followed by the domestic market; 8.6% and 1.8% and transborder with 5.2% and -3.5%.

Charter Air Services**

An analysis of the number of charter passengers carried by Level I carriers is presented in this section. Although the use of revenue passenger-kilometres would probably have been a better indicator of the importance of charter services provided by Canadian air carriers, these data are no longer readily available due to reductions in Level I carrier reporting requirements.

A comparison of total charter passenger data (Table 1.8) during the first three quarters of 1984 with the same three quarters in 1985, shows a passenger volume increase of 12.4%. The domestic market with an approximate share of 11% of the total charter market in both 1984 and 1985, experienced an increase in passenger volume of 25.3% in 1985, the largest percentage increase of the three markets. The transborder market, with a total passenger share of 46%, showed a rise in passenger volume of 13.9% in 1985, while the international market with a passenger share of 43%, had the lowest percentage increase (7.8%) of the three markets in 1985.

In contrast to the traditional third quarter traffic peak for scheduled air services, the highest passenger volume in the total charter market has been historically observed during the first quarter of the year. A peaking in the demand for international and transborder charter services to southern destinations by vacationers during the winter months tends to coincide with a lower demand for scheduled services in this period. This difference between the peak periods for charter and scheduled services enables Level I carriers, which offer both scheduled and charter services, to maximize equipment utilization by shifting it between these two types of services. Wardair, which operates only charter services, maximizes its equipment utilization by shifting between European and southern destinations. Approximately half of the annual transborder passenger trips traditionally

* Average stage length = kilometres flown/number of departures.

** Includes Advance Booking Charters (ABC's), Inclusive Tour Charters (ITC's), Common Purpose Charters (CPC's) and Advance Booking/Inclusive Tour Charters combined (AT's).

occur during the first quarter of the year. The international market has tended to peak during the third quarter, principally due to the extensive charter operations of Wardair. This third quarter peak, however, is only slightly higher than the volume reached in the first quarter. The domestic market tends to parallel the quarterly passenger volume pattern observed for scheduled services, i.e. peaking in the third quarter, where approximately half of the annual domestic charter passenger trips occurred.

As was the case for total scheduled services, a marginally higher increase in passenger traffic for total charter services in 1985 occurred during the two non-peak quarters combined than in the peak-volume first quarter.

A comparison of individual carriers reveals Wardair as being the most active operator with respect to charter services. Wardair, which is responsible for the majority of Level I domestic and international passenger traffic and approximately one third of transborder traffic, accounts for roughly half of the total Level I charter passenger volume in all three market segments. Each of the other Level I carriers, with the exception of EPA (less than 1 %), had a share of between 8% and 12% of the total Level I charter traffic in 1985.

In terms of the increase in the actual number of charter passengers carried in the first three quarters of 1985, Quebecair accounted for almost half of the total increase in charter traffic experienced by all Level I carriers over the comparable period in 1984. This resulted from very large increases in the number of passengers carried by Quebecair in both the transborder and international markets. Wardair was responsible for approximately one quarter of the total increase in charter passenger volume, while four of the remaining five Level I carriers showed smaller increases and Air Canada actually experienced a decline in its charter passenger volume.

Table 1.5

DOMESTIC CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS
1984-1985

	<u>Air Canada</u>	<u>CP Air</u>	<u>PWA</u>	<u>Nordair</u>	<u>Quebecair</u>	<u>EPA</u>	<u>Wardair</u>	<u>Total</u>
<u>1984</u>								
First Quarter	0	208	5 193	2 389R	0	0	4 804	12 594
Second Quarter	0	0	5 769	1 237	0	0	59 730	66 736
Third Quarter	0	1 720	25 357	3 042R	0	0	130 208	160 327
Fourth Quarter	0	14 377	7 409	1 386	0	0	45 954	69 126
Annual Total	0	16 305	43 728	8 054	0	0	240 696	308 783
<u>1985</u>								
First Quarter	0	17 189	3 285	1 474	243	0	11 226	33 417
Second Quarter	0	13 966	3 785	835	0	0	86 983	105 569
Third Quarter	0	12 133	15 661	0	0	0	133 577	161 371
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: R - Data has been revised from Air Transport Monitor, Volume 1, Number 4 (October 1985).
Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.6
TRANSBORDER CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS
1984-1985

	<u>Air Canada</u>	<u>CP Air</u>	<u>PWA</u>	<u>Nordair</u>	<u>Quebecair</u>	<u>EPA</u>	<u>Wardair</u>	<u>Total</u>
<u>1984</u>								
First Quarter	135 114	73 958	73 061	93 642	0	1 936	245 231	622 942
Second Quarter	54 037	40 101	37 611	58 508	1 711	2 029	77 128	271 125
Third Quarter	10 146	22 022	23 896	56 302	2 660	0	30 747	145 773
Fourth Quarter	34 953	58 076	44 248	66 191	2 830	0	123 353	329 651
Annual Total	234 250	194 157	178 816	274 643	7 201	3 965	476 459	1 369 491
<u>1985</u>								
First Quarter	127 939	81 433	96 146	90 405	17 754	4 042	285 509	703 228
Second Quarter	56 642	34 353	49 740	70 067	5 647	4 393	87 855	308 697
Third Quarter	21 341	10 885	40 051	54 270	7 673	0	38 410	172 630
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.7

INTERNATIONAL CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS
1984-1985

	<u>Air Canada</u>	<u>CP Air</u>	<u>PWA</u>	<u>Nordair</u>	<u>Quebecair</u>	<u>EPA</u>	<u>Wardair</u>	<u>Total</u>
<u>1984</u>								
First Quarter	43 023	27 377	68 591	24 995	13 233	1 838	184 713	363 770
Second Quarter	10 819	11 502	17 900	22 753	15 825	624	189 827	269 250
Third Quarter	30 273	5 724	10 806	18 900	38 053	0	269 625	373 381
Fourth Quarter	1 545	13 007	18 771	32 054	20 184	0	111 863	197 424
Annual Total	85 660	57 610	116 068	98 702	87 295	2 462	756 028	1 203 825
<u>1985</u>								
First Quarter	7 724	30 744	66 440	38 969	68 259	1 697	150 753	364 586
Second Quarter	8 023	15 257	22 199	29 472	48 844	918	200 941	325 654
Third Quarter	22 175	14 743	10 594	17 232	54 896	0	275 452	395 092
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.8

TOTAL* CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS
1984-1985

	<u>Air Canada</u>	<u>CP Air</u>	<u>PWA</u>	<u>Nordair</u>	<u>Quebecair</u>	<u>EPA</u>	<u>Wardair</u>	<u>Total</u>
<u>1984</u>								
First Quarter	178 137	101 543	146 845	121 026	13 233	3 774	434 748	999 306
Second Quarter	64 856	51 603	61 280	82 498	17 536	2 653	326 685	607 111
Third Quarter	40 419	29 466	60 059	78 244	40 713	0	430 580	679 481
Fourth Quarter	36 498	85 460	70 428	99 631	23 014	0	281 170	596 201
Annual Total	319 910	268 072	338 612	381 399	94 496	6 427	1 473 183	2 882 099
<u>1985</u>								
First Quarter	135 663	129 366	165 871	130 848	86 256	5 739	447 488	1 101 231
Second Quarter	64 665	63 576	75 724	100 374	54 491	5 311	375 779	739 920
Third Quarter	43 516	37 761	66 306	71 502	62 569	0	447 439	729 093
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: * Includes domestic, transborder and international charter air services.
Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

SUMMARY OF SCHEDULED CARRIER ACTIVITY

The principal changes occurring in the level of service at Canadian communities in the fourth quarter of 1985 are shown on Table 1.9 and summarized below. Comparisons are made with the previous quarter and with the same quarter in 1984.

Service Changes

Scheduled capacity decreased by 9% from that of the third quarter of 1985 as carriers introduced their winter schedules. Seasonal fluctuations explain all of the decrease since fourth quarter capacity has increased 7% over the same period in 1984. Non-jet operations have exhibited the largest increase, 21% over the previous year, but the 5% gain registered by jet operators represents a significant increase because the 42,000 new seats is twice the number of new seats offered on non-jet equipment.

Seating capacity at most major hubs increased significantly since 1984. Halifax continued to register the largest increase, posting a 17% gain in capacity since 1984. Toronto (10%), Ottawa (7%), Vancouver (7%), Winnipeg (6%), Montreal (5%) and Edmonton (4%) also exhibited significant growth. Calgary's capacity decreased by 5%.

Southern Domestic Sector

Changes to seating capacity in the Southern Domestic Sector closely followed those changes occurring in the total market as seats decreased by 8% from the previous quarter but increased by 6% over the previous year.

Four communities in Québec received their first regularly scheduled air service during the fourth quarter of 1985. Quebec Aviation Ltée of Québec City began operations to Sherbrooke from Montréal and Québec City. Air Alma began a daily service joining the two Lac St-Jean cities of Alma and Roberval with Montréal. Propair, the Rouyn based carrier operating under Quebecair's designator, introduced new service to Amos on a daily Rouyn-Amos-Montreal route. All of these services are operated with light propeller equipment.

Nordair withdrew much of its non-jet service in anticipation of the new Nordair Métro service. The Montréal-based carrier discontinued its daily service on the Montreal-Dolbeau-Chibougamau route although Quebec Aviation Ltée has restored part of the service with a twice daily Montreal-Chibougamau route. No replacement is foreseen at Dolbeau. Nordair also discontinued service on the Montreal-Ottawa-Hamilton route. Hamilton had received no other domestic service.

Skycraft Air Transport Inc. became one of the newest entrants by introducing scheduled service from its Oshawa base to Montreal, Ottawa, and Windsor. Oshawa had previously been served under an irregular service pattern. Pem-Air, of Pembroke introduced twice daily service to the newly opened Cornwall airport from Toronto. At the same time, Pem-Air discontinued its service from Pembroke to North Bay and Montreal although it maintained its Pembroke-Toronto schedule. Norontair of North Bay continued its

Table 1.9

SUMMARY OF SCHEDULED CARRIER ACTIVITY
FOR WEEK OF NOV. 15-21, 1984 AND 1985

Departures and Seats

	<u>Year</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
		<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	1984	4428	559250	2984	89341	7412	648591
	1985	4746	578347	3939	109277	8685	687624
Northern Domestic Sector	1984	438	42820	1020	26364	1458	69184
	1985	468	46325	1305	30443	1773	76768
Transborder Sector	1984	1187	162927	248	6389	1435	169316
	1985	1319	177566	343	8182	1662	185748
International Sector	1984	269	81491	4	160	273	81651
	1985	285	86645	4	160	289	86805
All Sectors	1984	6322	846488	4256	122254	10578	968742
	1985	6818	888883	5591	148062	12409	1036945

Percentage Change in Departures and Seats

	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	+7.2	+3.4	+32.0	+22.3	+17.2	+6.0
Northern Domestic Sector	+6.8	+8.2	+27.9	+15.5	+21.6	+11.0
Transborder Sector	+11.1	+9.0	+38.3	+28.1	+15.8	+9.7
International Sector	+5.9	+6.3	0.0	0.0	+5.9	+6.3
All Sectors	+7.8	+5.0	+31.4	+21.1	+17.3	+7.0

expansion of services by adding Hearst to its Northern Ontario network. Hearst will be served by two daily flights from Timmins. Austin Airways of Timmins added three daily roundtrips between Thunder Bay and Kenora.

Regular scheduled service returned to Red Deer as a new entrant, Air Alberta, inaugurated service to Calgary and Edmonton. Calgary is served by five flights a day while Edmonton's Municipal Airport receives two flights a day. Air Alberta uses 19-seat Embrae Bandeirante equipment.

Pacific Western was the most active of the major carriers as it transferred some of its local British Columbia routes to Lethbridge based Time Air. Time Air is partly owned by Pacific Western. Campbell River and Comox lost its jet service as Time Air replaced Pacific Western. Similarly, most of Pacific Western's Victoria-Vancouver service was replaced with Time Air's 36-seat Shorts 360 aircraft. Time Air has reintroduced service on a Penticton-Kelowna-Kamloops-Williams Lake-Prince George route with 15-seat, Beech 99 equipment. 50-seat Convair 580 equipment was used to replace Pacific Western on the Prince George-Dawson Creek-Edmonton (Municipal) route. Pacific Western continues to serve Dawson Creek and Prince George from Vancouver. However, Pacific Western added two daily B-737 round-trips between Vancouver and Edmonton (International). The new service will compete directly with Air Canada and CP Air.

On the national scene, Air Canada discontinued its recently established Calgary-Edmonton (Municipal) service. Pacific Western and Time Air continue to serve the route. CP Air discontinued much of its premium-class Air Attache service although much of the capacity was transferred back to regular services. However, CP Air withdrew non-stop service between Montreal and Vancouver and left Halifax-Toronto service to its subsidiary Eastern Provincial. Operations of CP Air and Eastern Provincial were totally integrated on January 15, 1986.

Northern Domestic Sector

Seating capacity decreased by 8% from the previous quarter but seasonality explains all of the decrease because capacity has increased 11% over the previous year. Some of the increase was artificial as Timmins based Austin Airways began publishing schedules between Sioux Lookout and ten communities in northwestern Ontario. All points were previously served under a Class 3 licence.

Pacific Western's reorganization of its network also applied to the north as the airline discontinued service to Fort Simpson and Whitehorse. Fort Simpson-Yellowknife continues to be served by Northwest Territorial Airways. Whitehorse is served by CP Air. Trans-North Turbo Air of Whitehorse also discontinued its Whitehorse-Watson Lake service. No replacement service is foreseen but CP Air continues to serve Watson Lake.

Northwest Territorial Airways (N.T.A.) inaugurated a daily round-trip service joining its Yellowknife base with the two Edmonton airports. Edmonton's Municipal airport is served with a stop at International airport. N.T.A.'s Lockheed Electra will compete directly with Pacific Western's jet service to Edmonton International airport. At the same time, N.T.A.

discontinued its service to Hall Beach. First Air and Nordair continue to serve Hall Beach but N.T.A.'s withdrawal represents a complete loss of service towards the west.

Transborder Sector

Transborder capacity decreased only by 1% from the previous quarter and has increased 10% over the same period in 1984.

As mentioned in the last issue, Continental Airlines has returned American carrier service to the Vancouver-Honolulu route vacated by South Pacific Island Airways. The three weekly DC-10 roundtrips will compete with CP Air. Eastern Airlines of Miami discontinued its daily service between New York's Kennedy airport and Montreal (Dorval). However, both Eastern and Air Canada continue to provide frequent Montreal-New York services via La Guardia airport.

Mall Airways of Albany, N.Y. added Ottawa to its network by inaugurating a twice daily Beech 99 link with Syracuse. Mall Airways already serves Montreal and Toronto. The non-jet service will compete directly against Piedmont Airlines three daily jet flights. Piedmont Airlines also serves Montreal. Otter Air introduced floatplane service between its Seattle base and Victoria harbour. The two daily round-trips stop at Port Townsend, Washington.

International Sector

Seasonality was most evident in the international sector as scheduled carriers reduced seating capacity by 29% from the summer period. However, capacity remains 6% greater than for the corresponding period in 1984.

The successful conclusion of bilateral treaties with New Zealand and Netherlands prompted CP Air to reorganize its international network. CP Air added a weekly Toronto-Honolulu-Auckland service while Air New Zealand inaugurated a weekly Vancouver-Honolulu-Auckland flight.

The revision of the bilateral treaty with Netherlands permitted the realignment of CP Air's European services. CP Air increased its Toronto-Amsterdam service to a daily frequency and increased Toronto-Milan service to three flights a week. The carrier discontinued service between Amsterdam and Halifax, Montreal, and Winnipeg. CP Air will continue to market seats for Montreal-Amsterdam pair because of a commercial agreement with the Dutch carrier K.L.M.

CP Air also increased frequency on its Pacific routes. The airline added three weekly non-stops between Vancouver and Hong Kong to compete with Cathay Pacific. Hong Kong had previously been served with a stop at Tokyo. Vancouver-Tokyo service was upgraded to a daily service. However, CP Air discontinued its twice weekly service between Vancouver and South America. The carrier continues to serve Buenos Aires, Lima, and Santiago from Toronto.

New bilateral accords were also responsible for new services to the Caribbean. Air Canada added a weekly Toronto-St. Lucia service while B.W.I.A. added a weekly Toronto-St. Kitts round-trip.

DOMESTIC AIR FARE INDICES

In this section, air fare indices, which represent price trends for both full fare and discount fare products in the domestic market, are analysed. The intention of the analysis is to address two issues which have been raised frequently since the beginning of the easing of economic regulation announced in the "New Canadian Air Policy" on May 10, 1984. The first issue is whether the basic trend followed by these two fare types has changed since the easing of the regulatory regime. The second one is to what extent discount fares have lowered the real cost of air travel.

For comparison purposes, the following four series of price indices are summarized in Table 1.10 (and also illustrated in Figure 1.1):

- Consumer Price Index (CPI);
- Full Fare Index;
- Discount Fare Index; and
- Average Yield Index.

The full fare index is based on the Economy fare products, while the discount fare index is based on the most frequently available discount fare products throughout the study period (i.e. the first quarter of 1983 to the last quarter of 1985). The detailed methodology for the development of these two index series is outlined in Part III of this issue of the Air Transport Monitor. The average yield index is derived from the ratio of the total passenger revenues to the total number of passenger kilometres for all scheduled domestic air services provided by all Level I carriers except Quebecair. It should be noted that an average yield index reflects not only changes in fares but also changes in the product mix and in trip length.

It is clear that, as of 1983, both economy and discount fares have risen faster than the CPI. Over the study period, economy fares have increased by almost 18% and discount fares have risen by some 20% as opposed to a 12% increase for the CPI. In the last three years, the largest increase in the economy fare index took place in the fourth quarter of each year. In contrast, discount fares generally reached the highest quarterly level in the third quarter of the year to drop to a significantly lower level in the following quarter. The lowest level of both economy and discount fares in the course of the year occurred in the first quarter. As evidenced by Table 1.10, the discount fare index shows more volatility than the economy fare index. The average yield index moved very closely with the CPI.

Table 1.10

PRICE INDICES FOR DOMESTIC SCHEDULED AIR SERVICES
(1st quarter of 1983=100)

	<u>Economy Fare¹</u>	<u>Discount Fare¹</u>	<u>Average Yield (Rev./RPK)²</u>	<u>CPI</u>
<u>1983</u>				
Q1	100.0	100.0	100.0	100.0
Q2	101.6	114.7	101.7	101.4
Q3	101.6	119.8	100.0	103.0
Q4	106.7	108.4	107.1	103.9
<u>1984</u>				
Q1	106.8	108.5	107.1	105.2
Q2	106.8	126.0	106.4	106.1
Q3	106.8	126.1	105.2	107.1
Q4	111.2	118.3	108.6	107.8
<u>1985</u>				
Q1	111.9	114.5	110.0	109.1
Q2	114.5	117.1	111.6	110.3
Q3	114.4	135.7	111.5	110.3
Q4	117.5	119.8	N.A.	112.3

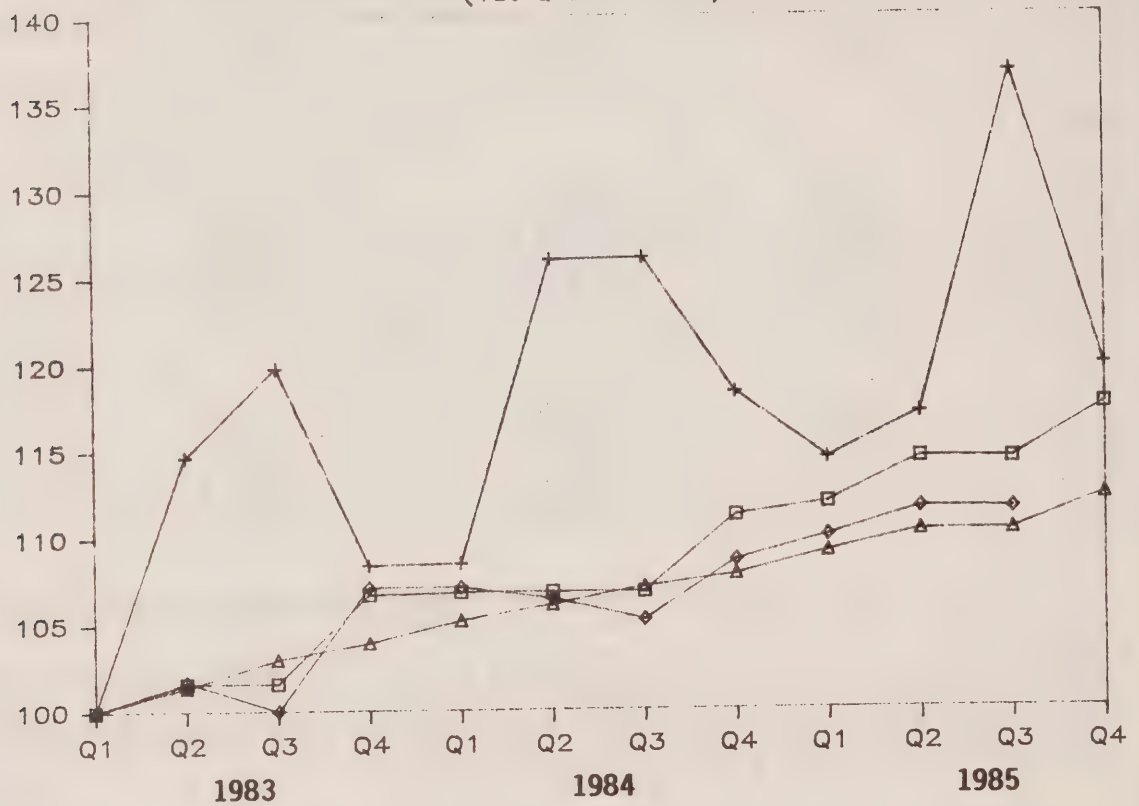
¹ The data are from "the Official North American Passenger Tariff Fares".

² The information is from the Fare Basis Survey of Statistics Canada and the data for the last quarter of 1985 are not currently available. Please note that average yield reflects not only changes in fare levels but also changes in product mix and the trip length.

FIGURE 1.1

PRICE INDICES FOR DOMESTIC AIR SERVICE

(1st Q 83 = 100)



LEGEND

- Economy Fare
- + Discount Fare
- ◇ Average Yield
- △ CPI

PART II

MARKET ANALYSIS

This part of the report presents a discussion of scheduled air services and prices in the B.C. market. With respect to services, the discussion covers scheduled services within B.C. and between major centres in B.C. and selected points outside the province. The discussion of air fares provides a brief look at the movement of prices in the B.C. market over the past two years as well as an examination of various air fares on comparable Canadian and U.S. routes during the last quarter of 1985.

SCHEDULED AIR SERVICES IN BRITISH COLUMBIA

This section provides a description of scheduled air services offered in British Columbia in the fourth quarter of 1985. The analysis is carried out for the week of November 15-21. In order to identify recent changes in available air services, a comparison is also made with services offered during the same week in 1984. In certain instances, information related to a period subsequent to the week of November 15-21 has been used in order to fill in gaps which result from a discussion limited to one specific point in time. Figures 2.1 and 2.2 provide a graphic representation of scheduled air services operated in British Columbia during the week of November 15-21 in 1984 and 1985 respectively. Before proceeding to a discussion of the services illustrated in these figures, the following cautionary points should be borne in mind. First of all, the figures do not provide any indication either with regard to the frequency of service between points or the number of carriers providing a connection between them. Thus, a connection provided once a week is shown in the same manner as a service with a frequency of three flights per day. Similarly, a connection provided by a single carrier is depicted the same way as services provided by several carriers. Furthermore, all services between two cities, except non-stop ones, may require a plane change or even a change in carrier, and this is also not shown in these figures. One way services are indicated by arrows, all other services are provided in both directions.

In British Columbia, scheduled air services have developed in the form of a network which links the northwestern region, the Cariboo, the interior, the southwest and the coastal region to the city of Vancouver.* In addition to playing a central role in travel to the interior of the province, Vancouver is also the major gateway for B.C. residents travelling to other regions in Canada and abroad. Of the 32 cities in British Columbia which received scheduled air services in the fourth quarter of 1985, 20 were linked to Vancouver by non-stop service.

In the fourth quarter of 1985, 13 Canadian carriers operated scheduled services in British Columbia, an increase of four carriers over the same period in 1984. Table 2.1 presents a listing of these carriers, identifies the type of equipment operated by each of them and provides the estimated seating capacity for each type of aircraft. Among the carriers which provided scheduled services in 1985 were three Level I operators, four Level II, two Level III and four Level IV carriers.

* For purposes of this section, the northwest region includes the settlements of Smithers, Terrace, Prince Rupert and Alice Arm on the mainland and Sandspit and Masset on Queen Charlotte Islands; the Cariboo region extends from Williams Lake to Fort Nelson; the interior region consists of the cities of Kamloops, Kelowna, Penticton, Castlegar and Cranbrook; the southwest region covers Victoria and Nanaimo; and the coastal region encompasses the communities of Gillies Bay, Comox, Campbell River and Port Hardy on Vancouver Island as well as the mainland settlements of Powell River, Bella Bella, and Bella Coola.

The British Columbia market has always been distinguished by its highly developed regional network. The bulk of the regional traffic is carried on Pacific Western's and CP Air's jet services although their share of total seats offered has declined to 57% in the first quarter of 1986 compared to the 66% share in the fourth quarter of 1984. Both carriers have supplemented their regional services with routes operated by associated, non-jet carriers. AirBC and Time Air have nearly doubled their share of capacity from 17% to 30% during the same period. The share of other carriers has remained constant.

The transition from jet to non-jet operations is clearly evident in Figure 2.3 which plots scheduled carrier activity for each of the five British Columbia regions. The most dramatic change has occurred in the southwestern B.C. region where a 152% increase in frequency has resulted in a 34% increase in seats flown. Average seating capacity of flights has decreased from 45 seats in 1984 to 24 seats in 1986. A similar result has occurred in the coastal market although the changes in frequency and capacity have not been as dramatic as the southwestern B.C. market. Non-jet operations have also increased in the B.C. interior but jet services still carry the bulk of the traffic. The longer distances involved in northwestern B.C. and the Cariboo region has limited the growth of non-jet operations in these regions.

Calgary - based Pacific Western Airlines remains the largest regional carrier in British Columbia although its share of capacity decreased to 42% in 1986 from 51% in 1984. Pacific Western serves each of the five B.C. regions but the bulk of its services is concentrated in the B.C. interior. During the past year, the airline reduced its Vancouver-Victoria service and discontinued its Vancouver-Comox-Campbell River route. The lost service in these markets have been replaced by Time Air. The Lethbridge-based carrier also introduced new services in the Cariboo region. The two carriers combined account for 52% of the seats offered in the B.C. regional market.

In contrast, Vancouver - based CP Air has maintained its 15% share of regional capacity. Most of CP Air's regional expansion has resulted from its association with AirBC. The local service carrier, using CP Air's facilities, has added Kamloops, Kelowna, and Castlegar to its network in direct competition with Pacific Western's jet services. CP Air and AirBC now account for 35% of the regional capacity.

Despite maintaining their 13% share of capacity, other carriers have also witnessed a great deal of change. AirBC withdrew all of its routes not associated with CP Air, except for its services linking the Nanaimo, Vancouver, and Victoria harbours. Air Canada has cut its Vancouver-Victoria service by half. Inter City Air, North Cariboo Flying Service, and Northern Thunderbird Air abandoned all scheduled services. The withdrawal of such services was completely balanced by the entry of new carriers in the regional markets. Aquila Air, Burrard Air, Mountain Pacific Air, Skylink, and Wilderness Airlines have all introduced service since the Minister of Transport announced his new transport policy.

Figure 2.1

SCHEDULED AIR SERVICES IN BRITISH COLUMBIA
For week of Nov. 15-21, 1984

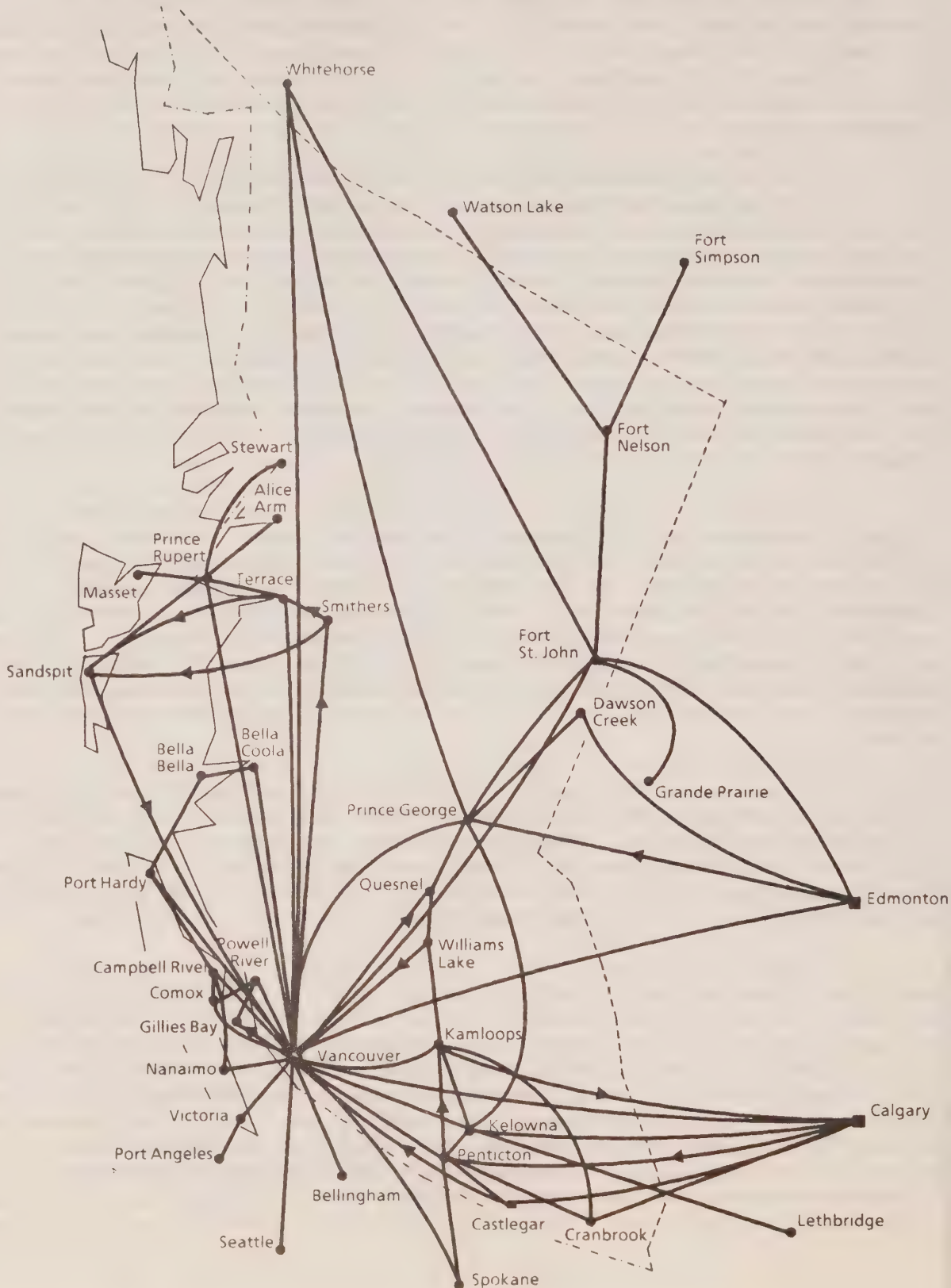


Figure 2.2

SCHEDULED AIR SERVICES IN BRITISH COLUMBIA
For week of Nov. 15-21, 1985

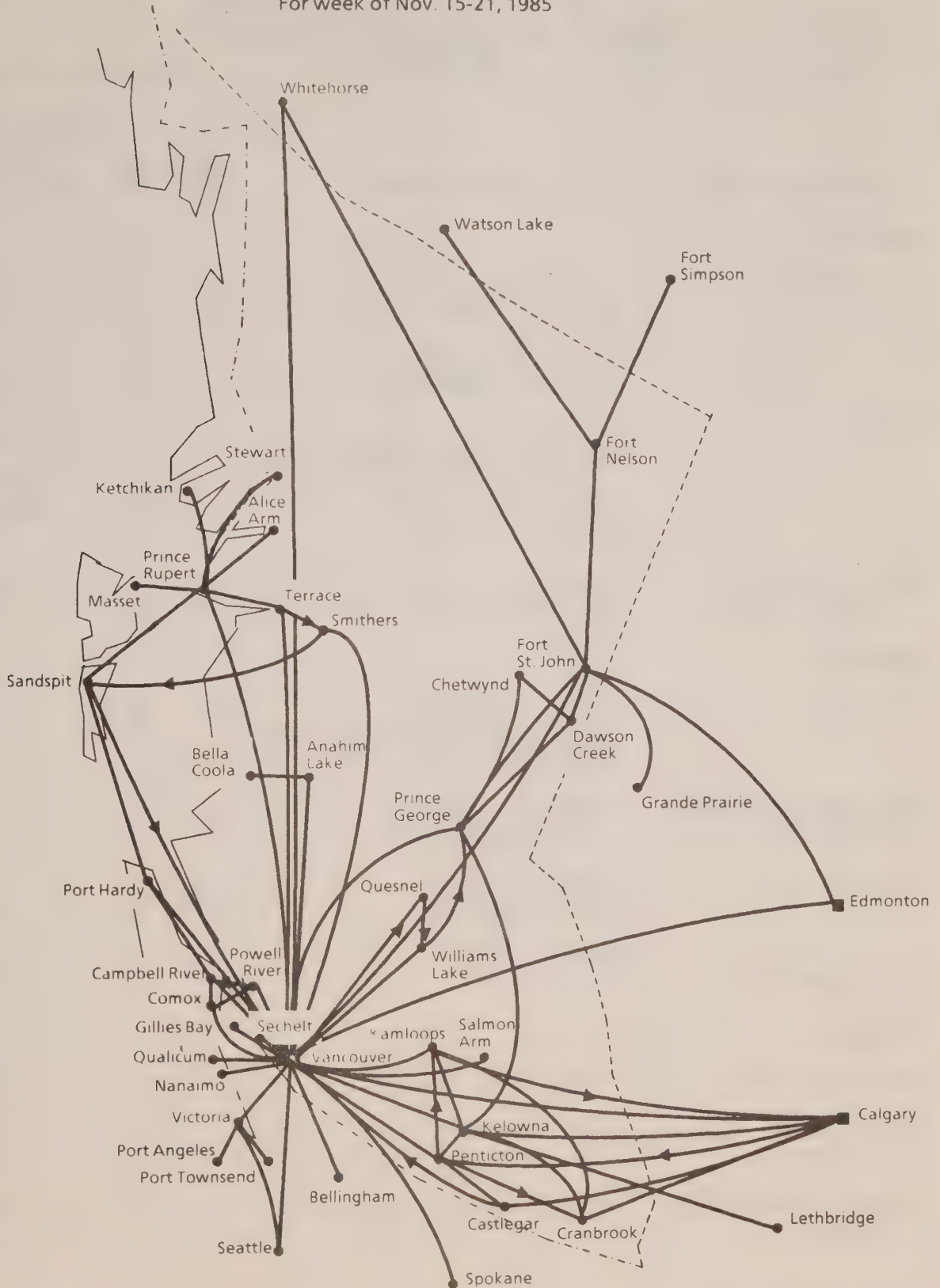


Table 2.1

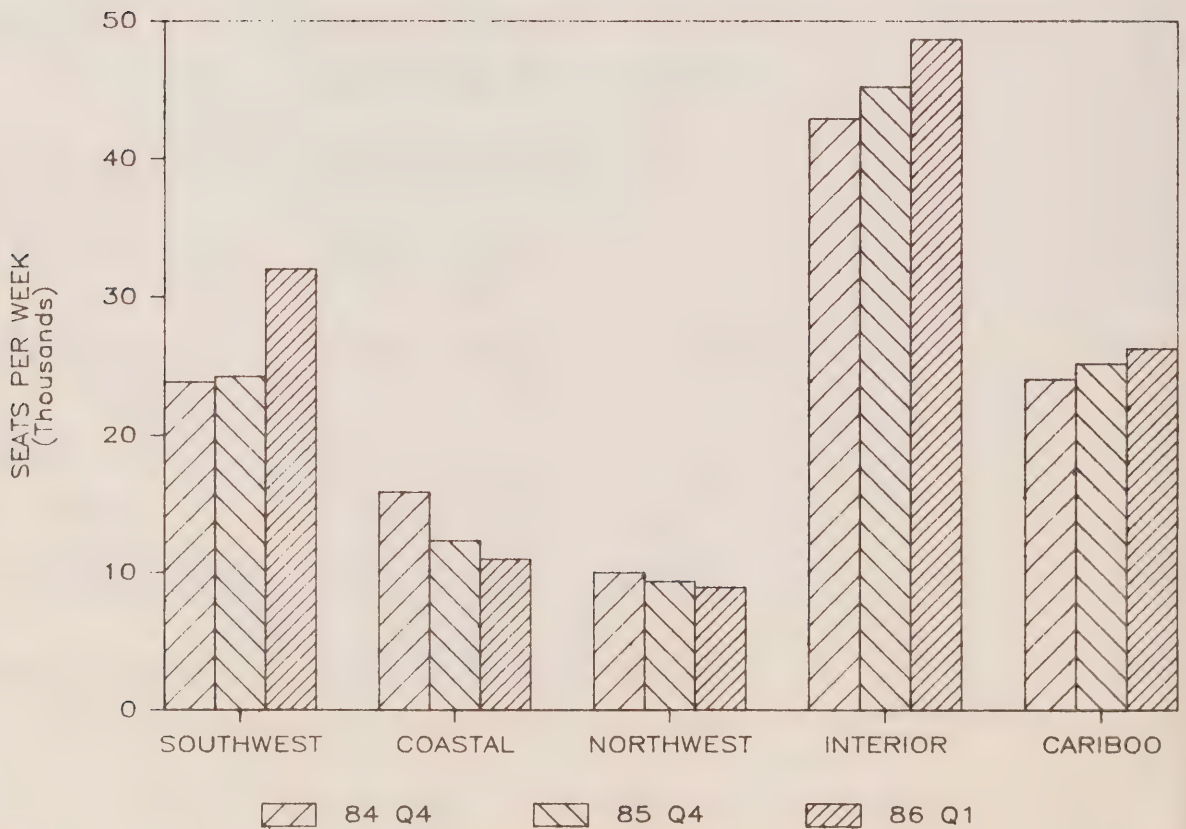
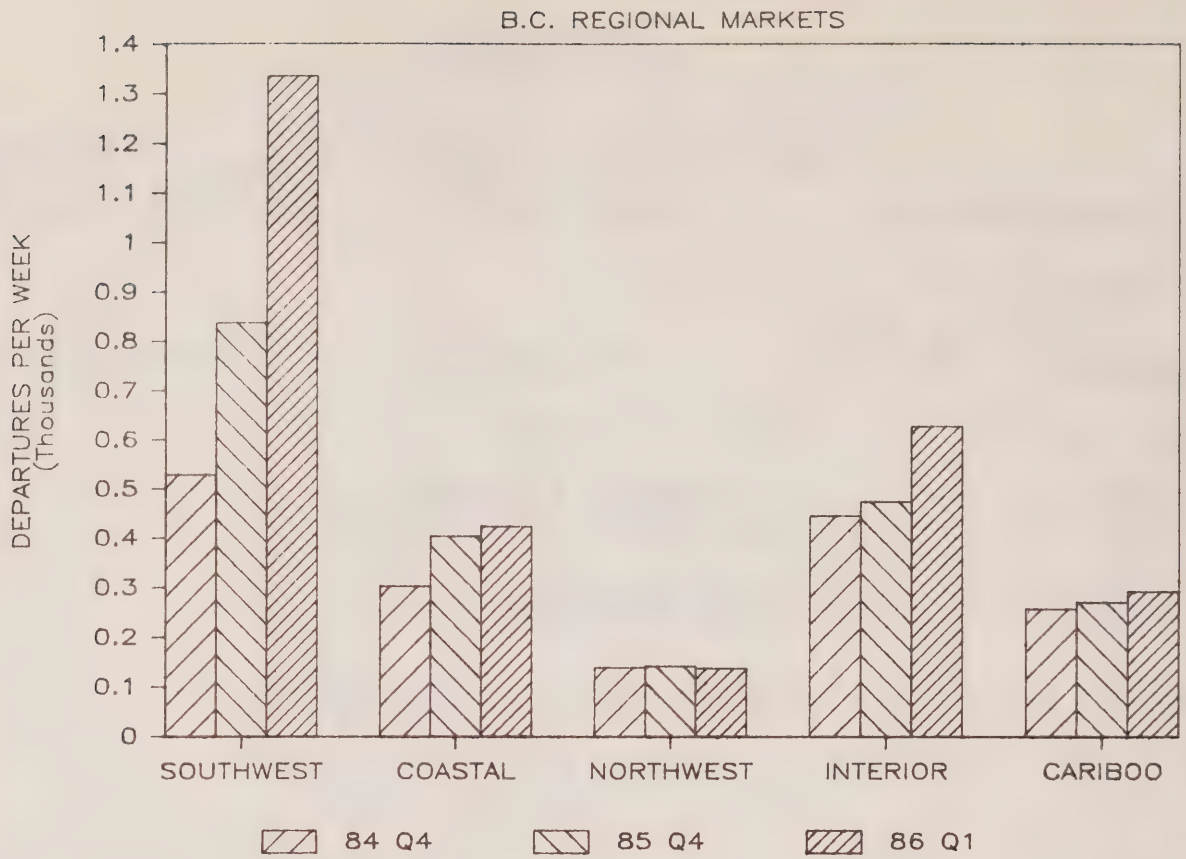
FLEET OF CANADIAN CARRIERS OPERATING
SCHEDULED SERVICES IN BRITISH COLUMBIA -
1984 AND 1985

Canadian Carrier	Aircraft Type	Used In		Estimated Seating Capacity
		1984	1985	
<u>LEVEL I</u>				
Air Canada	Lockheed L-1011 - 1/100	X	X	288
	Lockheed L-1011 - 500	X	X	244
	Boeing 767	X	X	201
	Boeing 727 - 200	X	X	132
	McDonnell Douglas DC-9 -30	X	X	102
CP Air	Boeing 747	X	X	409
	McDonnell Douglas DC-10 (all series)	X	X	256-289
	Boeing 737 - 200	X	X	96-119
	Boeing 737 - 300		X	108
Pacific Western Airlines Ltd.	Boeing 767	X		229
	737 - Boeing 737 - 200		X	119
<u>LEVEL II</u>				
AirBC Ltd.	DeHavilland DHC-7	X	X	50
	DeHavilland DHC-6 Twin Otter	X	X	20
	DeHavilland Otter	X		10
Northwest Territorial Airways Ltd.	Douglas DC-3 Mixed Passenger/Freight	X	X	14
Time Air Ltd.	Convair - 580		X	48
	DeHavilland DHC-7	X	X	50
Trans-Provincial Airlines Ltd.	Grumman Goose	X	X	10
<u>LEVEL III</u>				
Inter City Air	Convair (all series)	X		48
North Cariboo Flying Service Ltd.	Beechcraft C99		X	15
Northern Thunderbird Air Ltd.	DeHavilland DHC-6 Twin Otter	X		20

Table 2.1 (cont'd)

<u>Canadian Carrier</u>	<u>Aircraft Type</u>	<u>Used In</u>		<u>Estimated Seating Capacity</u>
		<u>1984</u>	<u>1985</u>	
Wilderness Airline (1975) Ltd.	Piper (all series)		X	7
<u>LEVEL IV</u>				
Aquila Air Ltd.	Piper (all series)		X	7
Burrard Air Ltd.	Britten-Norman Trislander		X	18
	Piper Navajo		X	7
Mountain Pacific Air Ltd.	Embraer Bandeirante		X	19
Skylink Airlines	Piper Navajo		X	7

FIGURE 2.3



Local traffic in the northwestern region of B.C. is serviced on a scheduled basis by Trans-Provincial Airlines Ltd. operating out of Prince Rupert. The type of aircraft used solely by Trans-Provincial in this region is the Grumman Goose. No new carriers have appeared in the region between November 1984 and November 1985. Transborder service has been renewed by Trans-Provincial in 1985 between Ketchikan, Alaska and Prince Rupert, providing one daily flight except on Saturday when there is no flight scheduled. The oneway daily service (except Saturdays) from Terrace to Sandspit and then on to Vancouver provided in 1984 by Pacific Western Airlines on a Boeing 737 aircraft has been discontinued in 1985. However, a new return service offering one flight a day (except Saturdays) between Sandspit and Port Hardy was added by PWA in 1985, using the same aircraft. A total of three flights a week each was provided in 1985 between Stewart and Prince Rupert, and Alice Arm/Kitsault and Prince Rupert, while service between Masset and Sandspit, on the Queen Charlotte Islands, and Prince Rupert on the mainland is on a daily basis. Terrace, B.C. is served by CP Air and PWA on a daily basis (PWA service excludes Saturdays) utilizing Boeing 737's flying the Vancouver-Terrace-Prince Rupert route and the Vancouver-Terrace-Smithers route, respectively. In addition, PWA offers a one-way service on Saturdays between Smithers-Sandspit-Vancouver and one return flight a day except Saturday between Smithers and Vancouver, both services using Boeing 737 aircraft.

The northern interior sector of B.C., the so-called Cariboo region, includes the major centers of Ft. St. John and Prince George. North Cariboo Flying Service Ltd. entered this regional market on a scheduled basis in 1985, providing daily service on weekdays between Ft. St. John and Prince George with services to Dawson Creek and Chetwynd on its itinerary, using Beechcraft 99's; this service, however, has since been discontinued. Daily service (except Saturdays) provided by PWA between Dawson Creek and Edmonton has been discontinued in 1985; likewise, one way service from Edmonton to Prince George totalling two flights a week has been dropped as well as return service between Whitehorse and Prince George of the same frequency. The three discontinued services mentioned were offered with Boeing 737 aircraft. Time Air has recently added new services on the Prince George-Dawson Creek-Grande Prairie-Edmonton (Municipal) route at the rate of two daily flights during the week and one flight a day on weekends, using Convair 580 equipment. Northern Thunderbird Air Ltd. withdrew its daily DeHavilland Canada Twin Otter service, operated under contract with PWA in 1985, from the Prince George-Quesnel-Williams Lake-Kamloops-Kelowna-Penticton route; however, this service has since been restored by Time Air except for Quesnel, with one daily flight on weekdays using Beechcraft 99's.

CP Air dominates the air transport activities around Ft. St. John. This B.C. center appears, in 1985, as a gateway to the North, with CP Air providing direct daily service to Whitehorse, Yukon and daily service (except Saturdays) to Fort Nelson, and then on to Watson Lake, Yukon three times a week; all of the above mentioned flights use Boeing 737 aircraft. There are two daily flights on weekdays between Edmonton and Ft. St. John with stops in Grande Prairie, Alberta, while the Edmonton to Ft. St. John direct route is serviced by one return flight on Sundays. Northwest Territorial Airways Ltd. operated one flight per week between Fort Nelson, B.C. and Fort Simpson,

N.W.T. in 1985, using the Douglas DC-3M but this air service has since been discontinued.

Pacific Western Airlines and CP Air are the two major carriers providing air services at Prince George. CP Air provides daily service between Prince George and Ft. St. John using Boeing 737's while service between Dawson Creek-Prince George and Prince George-Kelowna is provided daily (except on Saturdays) by PWA with Boeing 737 aircraft. Air services between Prince George and Vancouver are operated at the rate of five flights per weekdays, with one less flight on the weekend; this service is provided by both PWA and CP Air utilizing Boeing 737 aircraft. PWA supplements this Prince George-Vancouver service with daily stops at Kelowna (except Saturdays) and Williams Lake (except Sundays). A service of one flight a day (except Saturdays) is offered between Ft. St. John and Vancouver by CP Air. Service between Quesnel-Vancouver and Williams Lake-Vancouver is on a daily basis.

In terms of scheduled air services, the interior of British Columbia is linked primarily with Vancouver or Calgary, with Kelowna and Kamloops representing the hubs for air activity in the region. In the fourth quarter of 1985, about 16 flights a day stopped at Kelowna and ten at Kamloops. The local needs of the interior region are met mainly by scheduled services operated by PWA. Thus, PWA provides daily service to the communities of Kamloops, Kelowna, Penticton, Castlegar and Cranbrook with Boeing 737 with a capacity of approximately 120 seats. On the other hand, AirBC ties Kamloops to Vancouver, with five Dash-7 flights per day during the week and two and three flights per day on Saturday and Sunday respectively. This service, which did not exist in the fourth quarter of 1984, is operated through a commercial agreement with CP Air and competes with a similar service operated by PWA. AirBC has also recently introduced six daily non-stop return flights between Vancouver and Kelowna and two return flights per day between Vancouver and Castlegar.

From its base in Lethbridge, Alberta, Time Air Ltd. provides one return trip per day between Kelowna and Vancouver by Dash-7. Time Air also links Castlegar to Calgary with one Convair flight per day. In the beginning of 1985, Kelowna based Inter-City Air went bankrupt as a result of a price war between its competitors, PWA and CP Air, in the Kelowna-Vancouver market. The disappearance of Inter-City Air, deprived the communities of Kelowna, Kamloops and Penticton of their only direct services to Spokane, Washington. Finally, a new local carrier, Mountain Pacific Air Ltd., of Richmond B.C., provides four daily return flights between Salmon Arm, a settlement to the east of Kamloops, and Vancouver.

The easing of the regulatory regime has obviously stimulated competition in the southwestern region of British Columbia. The number of daily flights linking Victoria to Vancouver has increased from approximately 30 flights per day in 1984 to 40 in 1985, while service between Nanaimo and Vancouver has risen from 13 to 21 flights per day over the same time period.

Victoria has experienced a significant increase in air services in 1985 with eight carriers linking it with the mainland on a regular basis in the fourth quarter, compared to only five carriers in the fourth quarter of

1984. Skylink Airlines, a new carrier with its head office in Delta B.C., operates a shuttle service between Vancouver and Victoria consisting of nine flights per day during the week and three flights per day on weekends, by means of small Piper Navajo aircraft with a capacity of six to eight seats. Burrard Air of Richmond B.C., has operated a scheduled service between Vancouver and Victoria since July 1984. This carrier provides eight round-trip flights per day during the week and five daily round trips on weekends by Britten-Norman Trislander (a propeller aircraft with a capacity of about 20 seats). Time Air has recently established a connection between Vancouver and Victoria with a frequency of seven flights per day. This replaces the service previously provided by PWA which now offers only a single daily flight, originating in Edmonton, between Vancouver and Victoria. The service operated by Time Air between Victoria and Vancouver serves as a feeder service not only to PWA but also to Air Canada which has also drastically reduced its service between these two points. Air Canada presently operates only two daily flights by Boeing 727 between Vancouver and Victoria as extensions to its transcontinental service.

AirBC operates a daily float-plane service between Victoria and Vancouver harbours using Dash Twin Otters. AirBC also operates on the Victoria-Vancouver route as a result of a contractual agreement with CP Air dating back to 1983. Under this agreement, AirBC provides a Dash-7 service between Victoria and Vancouver international airports on behalf of CP Air. AirBC has a total of some 20 daily departures between Victoria and Vancouver. In addition, AirBC has also instituted its first transborder service which links Victoria to Seattle with four flights per day during the week and two daily flights on weekends. Finally, there are two American carriers which also serve Victoria. San Juan Airlines provide five daily flights between Victoria and Seattle with a stop at Port Angeles, Washington, using aircraft with a capacity of 20 seats. Recently, Otter Air Inc. of Seattle has started up service with two daily flights on the Victoria-Port Townsend-Seattle route with 10-seater De Havilland Beavers.

Nanaimo, to the north of Victoria, received a new service in 1985. Burrard Air Ltd. recently introduced a service between Vancouver and Nanaimo with a frequency of eight flights per day using 18-seater Britten-Norman Trislanders. Nanaimo is also served by AirBC which operates eight daily flights between the main airports at Nanaimo and Vancouver under the provisions of an agreement with CP Air. As well, AirBC operates a daily float-plane service between Nanaimo and Vancouver harbours under its own licence.

There were four air carriers operating in the coastal region of BC in the fourth quarter of 1985. AirBC provides a daily link between Comox, Campbell River, Powell River and Port Hardy to Vancouver under its commercial agreement with CP Air. In 1985, PWA withdrew from the daily service which it used to operate between Campbell River, Comox and Vancouver and handed this route over to Time Air. Burrard Air Ltd. has recently begun regular daily service between Campbell River and Vancouver. Qualicum-based Aquila Air Ltd., which has operated an unscheduled service between its base and Vancouver since 1973, now provides float-plane service between Qualicum and Vancouver four times a day using Piper aircraft. Wilderness Airline (1975) Ltd., instituted in 1985, a daily service from Bella Coola and Anahin Lake to

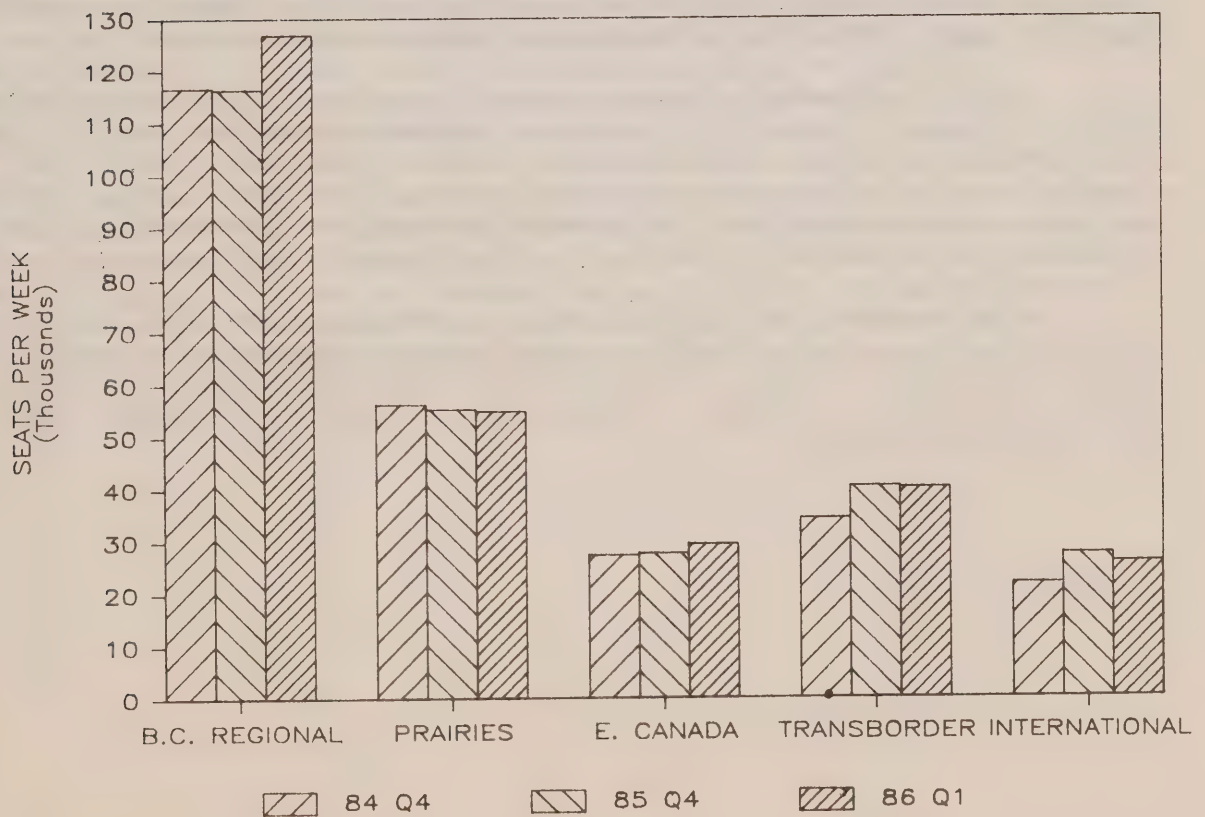
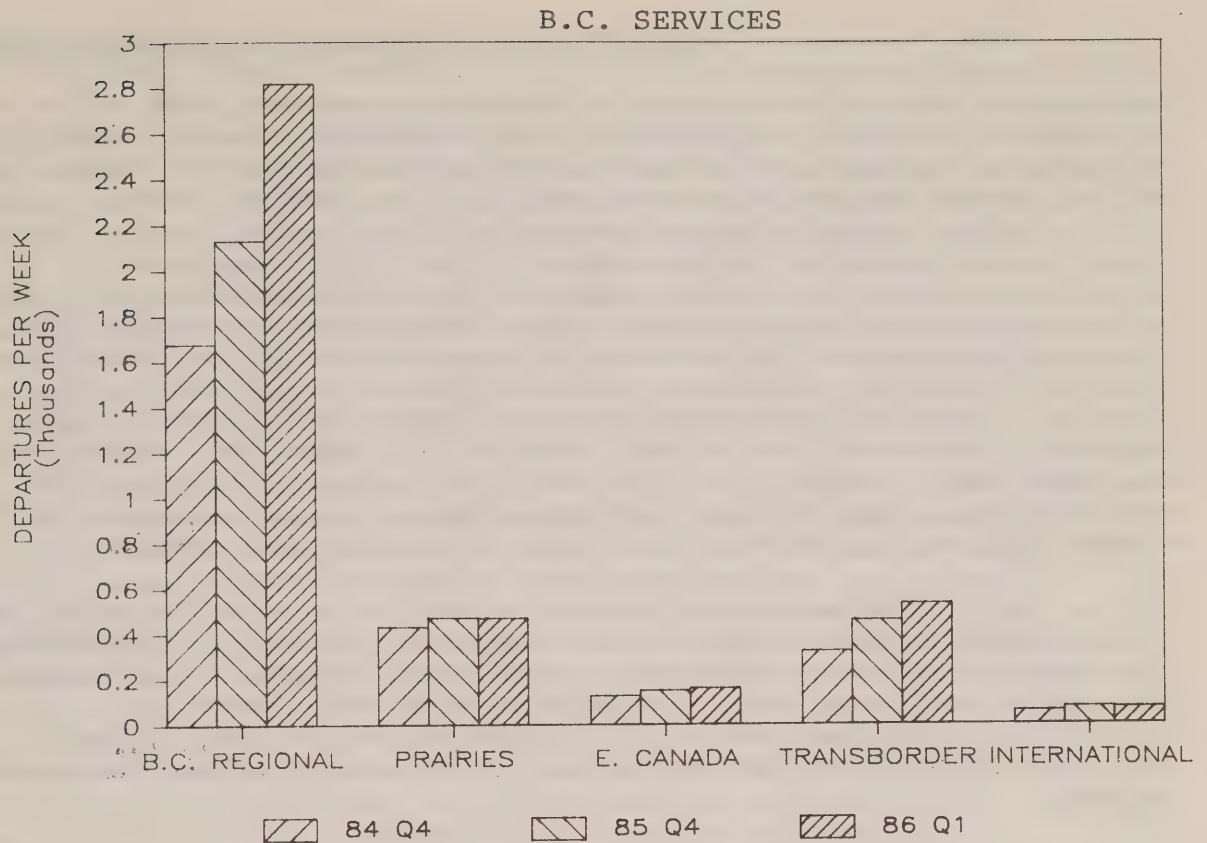
Vancouver which replaces the scheduled service that was previously provided by AirBC between Bella Coola, Bella Bella and Vancouver via Port Hardy.

The analysis of British Columbia air services would not be complete without specific reference to the links with the rest of Canada and the rest of the world. Such an analysis has to be centered on service levels provided between Vancouver and points outside the province since Vancouver acts as the central hub for all air traffic entering B.C. Figure 2.4 summarizes the level of activity of scheduled carriers offering services to points outside of British Columbia.

CP Air provides a service of two flights a week between Whitehorse, Yukon and Vancouver using Boeing 737 aircraft, while Saskatoon-Vancouver has daily service except on weekends furnished by Air Canada using McDonnell Douglas DC-9's. Air service between Winnipeg and Vancouver is provided by both Air Canada and CP Air with six daily flights on weekdays and three flights on weekends, utilizing Boeing and McDonnell Douglas aircraft of similar passenger capacity. Numerous air services are offered between Calgary and Vancouver, by carriers such as CP Air, Air Canada and PWA together providing approximately eighteen flights per weekday, eleven on Saturdays and fifteen on Sundays. The various aircraft used on this itinerary have an average seating capacity of 150. Similarly, service between Edmonton and Vancouver totals twelve flights a day during the week and eight flights per day on weekends, with the three aforementioned carriers providing the service with similar equipment as is used on the Calgary-Vancouver route. Between Toronto and Vancouver, there are approximately nine flights a day (except Saturdays which have five flights); Air Canada and CP Air provide the service between these two cities using various aircraft ranging from 100 to 450 seats. The Montreal-Vancouver route is served daily by one Air Canada Boeing 767 flight, the said aircraft being replaced on Saturdays by a Boeing 727. Likewise, service between Ottawa and Vancouver is offered by Air Canada at the same daily frequency (excluding Saturdays) using Boeing 727 aircraft.

In the fourth quarter of 1985, five American carriers and two Canadian operators, namely CP Air and PWA, provided air services between Vancouver and the United States. The cities of Bellingham, Spokane and Seattle in Washington state, Los Angeles, San Francisco and San Jose in California, Portland, Oregon and Chicago, Illinois were all connected to Vancouver by at least one flight a day. CP Air and Western Airlines are fighting for traffic in the Vancouver-Los Angeles and Vancouver-San Francisco markets while at the same time Pacific Western and United Airlines are rivals on the Vancouver-Seattle route. Finally, Continental Airlines and CP Air provide a link between Honolulu and Vancouver. Each of the remaining transborder routes operated out of Vancouver is served by a single carrier who, in all cases, is also an American one. Over the past year, there have been a number of changes in the transborder market. Service between Bellingham and Vancouver, which consisted of one flight per week in the fourth quarter of 1984, has expanded considerably with the start-up of San Juan Airlines' service of five daily flights to Vancouver. Finally, the California-based AirCal recently instituted a regular service with two flights per day between San Jose and Vancouver.

FIGURE 2.4



From Vancouver, a large number of international destinations are directly accessible by means of CP Air and Air Canada flights. Thus, Air Canada links Vancouver to London with five flights per week, some with a stop at Calgary or Edmonton, some non-stop. Air Canada also offers a weekly non-stop service from Vancouver to London and on to Dusseldorf, West Germany as well as a weekly Vancouver-Edmonton-Frankfurt (West Germany) connection. CP Air flies a daily service between Vancouver and Tokyo and offers two flights a week between Vancouver, Honolulu (Hawaii), Nadi (Fiji) and Sidney (Australia). In addition, CP Air links Vancouver with Amsterdam via Calgary twice a week and via Edmonton once a week. Recently, CP Air has also introduced two non-stop flights a week to Amsterdam and has just established a service to Hong Kong consisting of three flights a week. Finally, in return for rights which Air Canada and CP Air obtained on routes linking Vancouver to Australia, New Zealand, Great Britain, Japan, West Germany and Hong Kong, Qantas Airways Ltd. (the Australian carrier), New Zealand Air, British Airways, Japan Airlines, Lufthansa German Airlines and Cathay Pacific Airways (the Hong Kong carrier) also have the right to serve Vancouver.

British Columbia, and Vancouver in particular, plays a central role in the Canadian airline industry. According to 1984 origin and destination statistics, Vancouver represents the second largest domestic hub in Canada. The city is also the third most important destination in Canada for transborder and international traffic. Vancouver acts as the principal Canadian gateway for services destined to the rapidly developing Pacific Rim region.

If Vancouver remains the focal point of the British Columbia market, other communities also benefit from air transport services offered within and outside of the province. For instance, Victoria is a market which cannot be ignored by a carrier providing national service. Kelowna and Prince George have developed into major markets as well. Some of the smaller British Columbia communities also generate high passenger volumes.

British Columbia's rugged geography provides a unique opportunity to the air transport industry. Circuitous routings or the sea restrict the effectiveness of surface transportation. Much of the traffic that would normally travel on other modes is carried by air in British Columbia. Thus, it is not surprising that British Columbia has developed and benefits from one of the most extensive regional air service networks in Canada.

The large regional traffic base has encouraged the level of competitive activity since the Minister of Transport announced the new domestic air policy in 1984. The local Victoria-Vancouver market is one of the most competitive in Canada. Competition has also been introduced over much of British Columbia.

HISTORICAL MOVEMENT OF PRICES IN BRITISH COLUMBIA

Air fares observed in selected city pairs over the past two years in the British Columbia market are shown in Table 2.2. These city pairs cover the major centres within the province and the major points in Western Canada which are joined by scheduled air services to Vancouver and Kelowna. (See the previous section for a discussion of air services in the B.C. market.) With regard to full fares, in seven out of the 10 city pairs examined, the full fare offered by the dominant carrier on each route (the so-called modal full fare) and the lowest available full fare were identical in November 1985 as had been the case in November 1983. Furthermore, for all of these seven city pairs, both types of full fares also increased at the identical rate over the two-year period from 1983 to 1985.

The only route which faced a decline in full fares actually was the Victoria - Vancouver route, where the modal full fare decreased by 29% while the lowest full fare dropped by 35% between November 1983 and November 1985. This is a route in British Columbia where there has been a great deal of competition both in terms of the number of air carriers serving it and the number of daily flights being offered. On the Kelowna-Vancouver route, the lowest full fare charged by Time Air rose by only 4% compared to the 11% increase in Pacific Western's fare. In the case of the Saskatoon-Vancouver route, the fare charged by Pacific Western on its multi-stop service increased by 23% as opposed to an 11% increase in Air Canada's fare. Nevertheless Pacific Western's full fare remained, in November 1985, some 15% below the modal full fare charged by Air Canada on that route.

With respect to discounted fares, the situation is quite different. From column 3 of Table 2.2, a decline in discounted fares can be observed for seven of the ten city pairs and an increase in only three city pairs. For the five routes within the province, between November 1983 and November 1985 the decline in discount fares ranged between 6% and 41%. With regard to the five routes between points in B.C. and centres outside the province, discounted fares decreased on two of these routes and increased quite substantially on the other three.

As far as the B.C. market is concerned, it would seem that the May 1984 easing of economic regulations with respect to airline operations in the domestic market has had an impact not so much on full fares but on discount fares. In fact, air travellers between the majority of city pairs examined in the B.C. market, have benefitted from lower discount fares over the past two years, the drop being, in a number of instances, quite substantial.

Table 2.2

AIR FARES FOR SELECTED CITY PAIRS IN BRITISH COLUMBIA
NOVEMBER 15, 1983 - 1985

(Fares in Current Canadian Dollars)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fares</u>		<u>Discounted Lowest Non- Status Return Fare</u>
		<u>Modal</u>	<u>Lowest</u>	
Kelowna-Vancouver				
1985	287	166	112	59
1984	287	156	108	55
1983	287	150	108	81
Prince George-Vancouver				
1985	524	264	264	99
1984	524	248	248	119
1983	524	238	238	155
Kamloops-Vancouver				
1985	261	166	166	58
1984	261	156	108	55
1983	261	150	150	98
Prince Rupert-Vancouver				
1985	756	304	304	167
1984	756	284	284	139
1983	756	274	274	178
Victoria-Vancouver				
1985	62	96	56	38
1984	62	90	50	38
1983	62	136	86	43
Calgary-Vancouver				
1985	687	284	284	118
1984	687	268	268	119
1983	687	258	258	99
Vancouver-Winnipeg				
1985	1864	544	544	198
1984	1864	510	510	209
1983	1864	490	488	129
Saskatoon-Vancouver				
1985	1206	398	338	158
1984	1206	374	318	168
1983	1206	360	274	129

Table 2.2 (cont'd)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fares</u>		<u>Discounted Lowest Non- Status Return Fare</u>
		<u>Modal</u>	<u>Lowest</u>	
Kelowna-Calgary				
1985	400	222	222	122
1984	400	208	208	114
1983	400	200	200	130
Vancouver-Whitehorse				
1985	1485	520	520	286
1984	1485	488	488	249
1983	1485	470	470	306

Notes: These fares do not include tax.

Definitions of three fare types are found in Part C of previous issues of the Air Transport Monitor.

Sources: ATPCO Passenger Tariff, 13 November 1985
ATPCO Passenger Tariff, 07 November 1984
ATPCO Passenger Tariff, 16 November 1983

Official Airline Guide, 15 November 1985
Official Airline Guide, 01 November 1984
Official Airline Guide, 01 November 1983

Air carrier tariffs filed with the Air Transport Committee.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

Table 2.3 presents information on Canadian and U.S. domestic fares in the respective currencies of the two countries for four selected city pairs in each country. The city pairs in Canada and the U.S. were selected on the basis of their similarity in terms of both traffic volume and distance characteristics, since these are the two most important factors with respect to the economics of airline operations. With respect to the Canadian city pairs, the table focuses on the Pacific region and, to the extent that it was possible to do so, U.S. city pairs were also selected from a comparable geographic area, i.e. the western part of the country. Three fares are reported for each city pair. They include two full fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definitions of these fare types can be found in Part C of previous issues of the Air Transport Monitor.

In two out of the four Canadian city pairs and three out of the four U.S. city pairs examined in this section, the modal full fares offered by the dominant carriers (defined in terms of maximum non-stop flights per week) also represent the least expensive full fare which is available for travel in peak periods between these points. On the two Canadian routes where this is not the case, namely Kelowna-Vancouver and Saskatoon-Vancouver, the lowest full fares available are 67% and 85% respectively of the full fare offered by the dominant carrier. On the one U.S. route, where this situation occurs, namely Pasco/Kenwick-Seattle, the lowest full fare available amounts to 48% of the dominant carrier's full fare.

With regard to the lowest non-status discounted fares, these were substantially lower than the full fare available from the dominant carrier in all the Canadian and U.S. city pairs examined. Generally speaking, the spread between the discounted fares and the modal full fares on the Canadian routes is somewhat greater than the gap between these two fare types in the U.S.

In the Canadian market, the discounts from a full fare ranged from a high of 64% in the case of Kelowna-Vancouver and Vancouver-Winnipeg to a low of 45% in the case of Prince Rupert-Vancouver. With regard to the U.S. city pairs examined, the comparable discounts ranged from 52% in the case of Pasco/Kenwick-Seattle to 44% on the San Francisco-Tucson route.

Table 2.3

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES
NOVEMBER 15, 1985

(Canadian Fares in Current Canadian Dollars,
U.S. Fares in Current U.S. Dollars)

City Pair	1984 Passenger Volume*	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non- Status Return Fare
			Modal	Lowest	
Vancouver-Winnipeg	178,920	1,864	544	544	198
Denver-Detroit	179,420	1,841	278	278	146
Kelowna-Vancouver	147,150	289	166	112	59
Pasco/Kenwick-Seattle	156,206	277	150	72	72
Saskatoon-Vancouver	82,920	1,205	398	338	158
San Francisco-Tucson	75,840	1,217	259	259	146
Prince Rupert-Vancouver	48,800	756	304	304	167
Reno-San Diego	50,410	785	222	222	109

Notes: *Includes commuter traffic.

These fares do not include tax.

Definitions of the three fare types are found in Part C of previous issues of the Air Transport Monitor.

Sources: ATPCO Passenger Tariff, November 13, 1985.
Official Airline Guide, November 15, 1985.
Air carrier tariffs filed with the Air Transport Committee.
Airline flight schedule of People Express.

Part III

SPECIAL FEATURES

This part of the report provides a forum to report on the results of work carried out within the Research Branch as well as on topics which may be of particular interest to the consideration of competition and regulation in the Canadian air transport industry.

The paper in this issue of the Air Transport Monitor presents a discussion of the data base and methodology used to develop the domestic economy fare and discount fare indices which are presented in Part I of this publication.

Domestic Air Fare Indices: Data and Methodology

by Leesha Lin*

I. Introduction

The announcement of "New Canadian Air Policy" on May 10, 1984 initiated the trend towards deregulation of the airline industry. It was supposed to result in increases both in price competition and in service competition. As a result of the new policy, two changes in the domestic air travel market were expected; firstly, the general trend followed by the discount fare and the economy fare should have changed, and secondly, the market share of discount fare products should have increased. The former hypothesis can be tested by comparing the relative importance of the utilization of economy fares with the one of discount fares before and after the Policy announcement. As the availability of discount fare products varies between the different city pair markets, it is difficult to make an overall qualitative judgment of the fare information. However, in order to describe overall fare movements, the fare information of all city pair markets has to be systematically organized, condensed and quantified to produce series of fare indices which, then, can be used to provide a concise picture of recent fare trends.

i) The Index Objective

The principal objective of the approach is to design, develop and produce two series of national air fare indices: one for the economy fare product and the other for the most frequently available discount fare product. The economy fare products include only full fare regular product without any restrictions and excludes products that come under special program such as group, senior citizen and family plans. Fares selected are based on comparable products in which the continuity of these products can be observed throughout the study period. For instance, products selected for 1983 and 1984 include Charter Class Canada Round-Trip Excursion/Skysaver Round-Trip Excursion/Air Saver Class Fares, Countdown Fares, and a number of other round-trip excursion fare products. These products have restrictions attached to them including a minimum stay of at least until the first Sunday, a 14-day advanced booking, ticket purchase requirements, and limited seat allocation.

* The author is an economist with Research Branch of the Canadian Transport Commission. The author would like to thank Sandra Thompson and Beverley Cleary for their individual contribution respectively in fare collections and analysis, and in data inputting and parts of programming. The author would also like to thank Vivian Wei, Arvo Ray and Roger Roy for their useful comments. However, the opinions expressed in this article are strictly those of the author and do not necessarily reflect those of the Canadian Transport Commission.

The purpose of this paper is to describe the methodology and data used to produce the air fare indices published in Part I of this issue of the Air Transport Monitor. The indices were developed in order to analyse the impact of a liberalized regulatory environment on fare movements. Therefore, the indices are designed to provide indications on the overall trend of fares available throughout the country at a given point in time for scheduled domestic air services. Air services are regrouped under two large classes: economy and most frequently available discount service classes. The effect on fare movements of the May 10, 1984 policy can be analysed by comparing overall fare movements of the economy fare class with those of the discount fare class. In addition, the question of the "availability" of discount fare services can be addressed by reviewing its market share.

II. Background

The decision to construct air fare indices for two classes of fares, was preceded by consideration of other air fare index approaches. Two other series of air fare indices, available from two different sources, were reviewed. These two series of air fare indices are the Canadian domestic economy air fare index previously published in the "Air Transport Monitor" by CTC - Research* and the air fare index published in "Consumer Prices and Price Indices" by Statistics Canada.** The former is based on the Air Canada domestic economy fare formula filed with the Air Transport Committee but this formula is no longer representative of the overall movements of the economy fares.

As for the air fare index from Statistics Canada's "Consumer Prices and Price Indices", it is mainly designed to monitor consumers' utilization of air travel. It is focussed exclusively on discount fare products and, furthermore, this fare index is not solely based on domestic city pair markets, as it includes also transborder and international markets. Since only five out of the 15 city pairs used to construct the index are domestic ones, this air fare index is not appropriate to assess the effect of the new domestic air policy on domestic air fares.

III. Methodology

i) Data

Two main data sources were used to develop the two fare indices; one is the Official North American Passenger Tariff Fares and the other is

* Volume 1 of Air Transport Monitor, CTC - Research; and the "Low-Priced Air Fare Review - the First Five Years.", CTC - Research.

** Statistics Canada Catalogue No. 62-010 quarterly.

the Fare Basis Survey of Statistics Canada.* The former provides fares and terms and conditions associated with a fare product, while the latter contains data on revenues by fare type product and by city pair market.

ii) The Sample Design

There are approximately 500 city pair markets in the Fare Basis Survey, out of which a sample of 79 city pair markets was drawn. In order to select representative city pairs, city pairs were classified into 27 groups according to distance and size of Origin-Destination (OD) hubs.** A city pair market can be classified into one of the following three distance classes:

- short-haul for distance of less than 1127 kilometres;
- medium-haul for distance between 1128 and 1770 kilometres; and
- long-haul for distance in excess of 1770 kilometres.

A city pair market can also be classified into one of the following classes of OD hubs:

- trips between a large and a medium hub;
- trips between a large and a small hub;
- trips between a large and an "other" hub;
- trips between two medium hubs;
- trips between a medium and a small hub;
- trips between a medium and an "other" hub;
- trips between two small hubs;
- trips between a small and an "other" hub; and
- trips between two "other" hubs

Table 3.1 provides the distribution of city pair markets based on 1984 coupon OD. Once the city pairs were classified into groups, the coefficient of variation was calculated based on the unit fares of all city pairs included in each group. The coefficient of variation was then used to stratify the number of city pairs to be sampled proportionately to the size of the coefficient. In other words, the higher the coefficient of variation for a group, the larger was the number of city pairs to be selected for that group. Conversely, the lower the coefficient of variation, the smaller was the number of city pairs to be sampled. The number of city pairs sampled by group is given in Table 3.2.

* The Fare Basis Survey was instituted by the Aviation Statistics Centre of Statistics Canada. For 1983 and 1984, carriers participated in the Survey were Air Canada, CP Air, Eastern Provincial Airways, Nordair and Pacific Western Airlines. Although Quebecair commenced its participation, in parts, in 1985, Quebecair is excluded from the analysis.

** Source of Data: "Air Transport Monitor", Volume 2, No. 1, pp. 100 & 101, CTC - Research.

Table 3.1: The Distribution of the City-Pair Markets
According to 1984 O/D Traffic Data

<u>Size of hub</u>	<u>Length of Haul</u>			<u>Total</u>
	<u>Short</u> <u>(0-1127 Km)</u>	<u>Medium</u> <u>(1128-1770)</u>	<u>Long</u> <u>(1770 +)</u>	
Large/Medium	2	2	3	7
Large/Small	3	1	5	9
Large/Other	8	6	9	23
Medium/Medium	7	3	12	22
Medium/Small	25	7	20	52
Medium/Other	108	33	25	166
Small/Small	6	5	6	17
Small/Other	69	10	6	85
Other/Other	109	12	3	124
Total	337	79	89	505

Table 3.2: Distribution of the sampled city-pair markets

<u>Size of hub</u>	<u>Length of Haul</u>			<u>Total</u>
	<u>Short</u>	<u>Medium</u>	<u>Long</u>	
Large/Medium	1	1	1	3
Large/Small	1	1	1	3
Large/Other	2	1	2	5
Medium/Medium	2	1	1	4
Medium/Small	4	1	2	7
Medium/Other	11	5	4	20
Small/Small	1	1	2	4
Small/Other	10	2	2	14
Other/Other	16	2	1	19
Total	48	15	16	79

Once the number of city pairs to be drawn for a group was established, the city pairs were selected on the basis of their relative importance in the 1984 OD passenger volume. For example, if only one city pair was assigned to a group, the city pair with the highest traffic volume in that group was selected to represent the group; in cases where five city pairs were assigned, the five city pairs with the largest traffic volume in that group were retained.

iii) Basic Methodology

Air fare indices were designed in such a way as to measure the percentage change through time in the cost of purchasing a "constant basket" of scheduled domestic air travel services. In this context, the quantity and quality of air fare products for a city pair group had to be similar and comparable throughout the period. In order to ensure that changes in the mix of air travel by city-pair groups were taken into consideration over time, the chain Laspeyres index method was used. The index was calculated on a quarterly basis using the direct Laspeyres index method with a fixed reference period and yearly specific sample weights. The first quarter of 1983 was chosen as the base reference period. Fares for the following weeks were selected to represent the four quarters of a year:

- the week of Feb. 15 to Feb. 21;
- the week of May 15 to May 21;
- the week of Aug. 15 to Aug. 21; and
- the week of Nov. 15 to Nov. 21.

The first step in the derivation of the index was to collect air fares by product by city pair for each quarter of the study period (i.e. from the first quarter of 1983 to the 4th quarter of 1985). The information of the Official North American Passenger Tariff Fares, was used to develop a fare index for each product and for each city pair market. Where there were more than one carrier operating in a city pair market with different fares for the same product, the index was based on the fare offered by the dominant carrier in that market. In such cases, the Official Airline Guide was used to determine the dominant carrier, the dominance of a carrier being indicated by flight frequencies. When further clarification was required, carriers' air tariff filings with the Air Transport Committee were used.

Once the index was constructed by city pair for each class of air fare, it was then aggregated with the ones of the other markets to arrive at an overall index for the said class of fare. The weights used in the aggregation process were the revenues by fare class, by city pair market. The weights used for economy fare products and discount fare products are shown on Tables 3.3 and 3.4 respectively. A quarterly air fare index was then calculated for each year, resulting in three separate yearly index series. Finally, those three yearly index series were chained at common period. This process is summarized in Chart 3.1.

Table 3.3: A Comparison of Weights for Economy Fare Products (%)

<u>City-Pair Group</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Large/Medium, Short Haul	14.88	15.34	15.11
Large/Small, Short Haul	1.8	1.85	1.82
Large/Other, Short Haul	3.5	3.63	3.43
Medium/Medium, Short Haul	10.91	10.78	10.76
Medium/Small, Short Haul	9.65	9.28	8.84
Medium/Other, Short Haul	12.06	11.65	10.59
Small/Small, Short Haul	0.1	0.06	0.06
Small/Other, Short Haul	1.23	1.27	1.01
Other/Other, Short Haul	1.21	1.15	0.97
Large/Medium, Medium Haul	6.14	6.36	6.77
Large/Small, Medium Haul	0.53	0.54	0.55
Large/Other, Medium Haul	0.64	0.65	0.74
Medium/Medium, Medium Haul	3.31	3.16	3.08
Medium/Small, Medium Haul	1.55	1.42	1.30
Medium/Other, Medium Haul	2.13	2.08	1.90
Small/Small, Medium Haul	*	*	*
Small/Other, Medium Haul	0.18	0.18	0.18
Other/Other, Medium Haul	0.09	0.09	0.08
Large/Medium, Long Haul	16.23	17.29	19.07
Large/Small, Long Haul	3.47	3.23	3.4
Large/Other, Long Haul	0.27	0.28	0.27
Medium/Medium, Long Haul	7.79	7.83	7.51
Medium/Small, Long Haul	0.51	0.67	0.68
Medium/Other, Long Haul	1.79	1.19	1.82
Small/Small, Long Haul	*	*	*
Small/Other, Long Haul	*	*	*
Other/Other, Long Haul	*	*	*

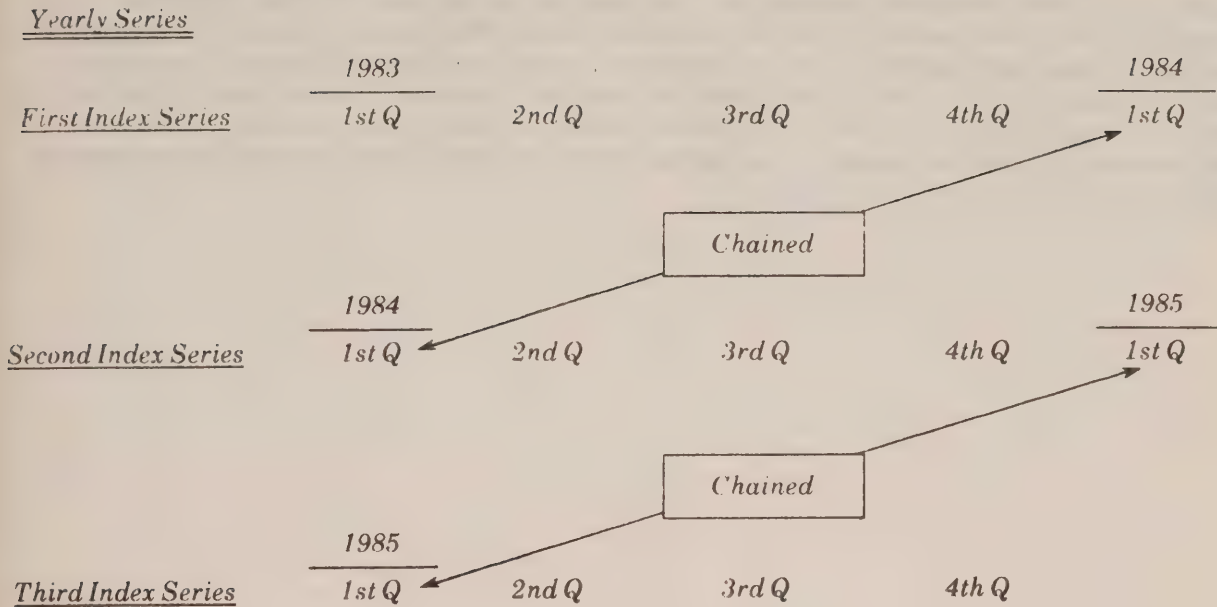
* The relative importance of these groups is quite small during our study period. Therefore, these groups will be excluded from the national air fare index in future issues.

Table 3.4: A Comparison of Weights for Economy Fare Products (%)

<u>City-Pair Group</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Large/Medium, Short Haul	6.61	8.17	7.86
Large/Small, Short Haul	1.98	2.16	2.06
Large/Other, Short Haul	2.31	2.27	2.60
Medium/Medium, Short Haul	8.82	8.93	8.86
Medium/Small, Short Haul	7.32	7.16	7.01
Medium/Other, Short Haul	6.95	7.48	7.39
Small/Small, Short Haul	0.1	0.06	0.06
Small/Other, Short Haul	0.54	0.62	0.62
Other/Other, Short Haul	0.56	0.54	0.48
Large/Medium, Medium Haul	7.5	7.33	7.68
Large/Small, Medium Haul	0.62	0.59	0.63
Large/Other, Medium Haul	0.99	1.16	1.35
Medium/Medium, Medium Haul	3.0	3.2	2.93
Medium/Small, Medium Haul	2.47	2.45	2.53
Medium/Other, Medium Haul	1.9	1.7	1.78
Small/Small, Medium Haul	*	*	*
Small/Other, Medium Haul	0.14	0.16	0.15
Other/Other, Medium Haul	0.03	0.02	0.03
Large/Medium, Long Haul	28.92	27.84	26.58
Large/Small, Long Haul	5.06	5.0	5.48
Large/Other, Long Haul	0.33	0.53	0.5
Medium/Medium, Long Haul	11.66	11.16	10.88
Medium/Small, Long Haul	0.63	0.77	0.85
Medium/Other, Long Haul	1.47	0.63	1.55
Small/Small, Long Haul	*	*	*
Small/Other, Long Haul	*	*	*
Other/Other, Long Haul	*	*	*

* See the note in Table 3.3.

Chart 3.1: Chaining Process



Within each series, the quarterly indices were calculated on the basis of the Laspeyres method. Then at the chaining process level, the Laspeyres index was modified to use the fixed weights of the current year instead of the ones of the base year. For example, the chain Laspeyres air fare index for the 4th quarter of 1985 is calculated by using the following formula:*

$$P_{85.4} = \frac{P_{85.4} \times Q_{85}}{P_{85.1} \times Q_{85}} \times \frac{P_{85.1} \times Q_{84}}{P_{84.1} \times Q_{84}} \times \frac{P_{84.1} \times Q_{83}}{P_{83.1} \times Q_{83}}$$

* $P_{85.4}$

denotes the air fare index number for a fare group in the fourth quarter of 1985;

$P_{85.1}$, $P_{84.1}$ and $P_{83.1}$

denote the air fare index number for a fare group in the first quarter of 1985, 1984 and 1983, respectively;

Q_{85} , Q_{84} and Q_{83}

denote the weights derived from the annual revenues of a fare group in 1985, 1984 and 1983.

IV. Summary and Future Research

As shown in Part I of this issue of the Air Transport Monitor, there have been certain changes in the yearly variations in the discount fare product since the easing of regulatory regime. However, it is still too early to conclude whether such a pattern is indicative of a trend that will continue in future years. The need to monitor fares will continue to exist and will continue to be done in future issues of the Air Transport Monitor. Refinements to the discount fare index could be made such as the inclusion of special seat sales in the index.

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INTRODUCTION

The Air Transport Monitor is prepared by staff of the Passenger Transport Studies and Economic and Social Research Directorates of the Research Branch of the Canadian Transport Commission. It is undertaken with the intent of collecting and disseminating information on service levels, air fares, and air carrier operations as may be of assistance to the consideration of competition and regulation in the Canadian air transport industry.

The objective of the Air Transport Monitor is to provide the reader with a concise discussion of changes which are taking place in the air transport market in Canada. To this end, it analyzes trends and highlights developments in the Canadian air transport industry during the quarter under study. The present issue of the report consists of three parts.

Part I, "Overview of the Canadian Air Industry", presents a broad snapshot of the industry by providing information on traffic, capacity, prices and operating performance.

Part II, "Market Analysis", presents a detailed examination of scheduled services and prices in a specific domestic market. For this purpose, Canada is divided into five distinct geographic regions, namely, Atlantic, Central (Québec and Ontario), Prairies, Pacific (British Columbia) and Northern. Each issue focusses on one or two of these regions.

Part III, "Special Features", reports on the results of work carried out within the Research Branch as well as on topics which may be of particular interest to the consideration of competition and regulation in the Canadian air transport industry.

All Aviation Statistics Centre (ASC) data not yet published by the ASC should be considered preliminary and may be revised in future issues. Questions pertaining to any aspect of the report or comments regarding possible additional topics which might be included in future issues should be addressed to Sheila Rajani, Research Branch, Canadian Transport Commission, Ottawa, Ontario K1A 0N9 or telephone (819) 997-2830.

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PART I

OVERVIEW OF THE CANADIAN AIR INDUSTRY

This part of the report presents a broad overview of the airline industry in Canada. Part I is divided into three separate sections. The first section provides an examination of the performance of Level I carriers in terms of selected efficiency indicators from 1981 to 1984. The second section presents a summary of scheduled carrier activity in terms of the number of seats and departures offered by these carriers as well as a discussion of major changes in services. The third and final section presents a discussion of domestic and transborder air fare indices for both economy and discounted fares.

OPERATING PERFORMANCE

In the previous issues of the Air Transport Monitor, broad overviews of the airline industry in Canada were presented. In this issue, some partial measures of Level I carriers' performance between 1981 and 1985 are presented to give some insights as to the performance level achieved within the said period.

The period under study (1981 to 1985) was one of changing conditions, the economic recession and the increased competitiveness within the airline industry being the two most important factors which affected air transport activities. Because economic activities are not homogeneously distributed among the various geographical regions of the country, the recession affected the regions with different levels of intensity. For any given carrier, the impact of the recession on its activities was partly a function of the geographic location of its operations and partly a function of the nature of its operations, a charter operator having more flexibility in adjusting its services to changes in demand than a unit toll operator.

The performance of Canadian Level I air carriers is assessed here by using the first type of productivity measure developed: the ratio of output to the associated labour input. When the carrier specific labour input information is related to a carrier specific output measure, one gets a measure of efficiency which is easy to calculate, but a measure which should not be used for inter-airline comparisons. Despite the fact that simple output per employee and output per labour dollar ratios were calculated for Level I carriers, such absolute measures are presented only to reflect changes in the use of labour per unit of output and to relate the changes of individual airline efficiency to the trends of Level I carriers, keeping in mind that changes in efficiency can be influenced or distorted by the environment and the circumstances prevailing at that point in time.

By 1985, Canadian Pacific Air Lines (CPAL) and Pacific Western Airlines (PWA) had not been able to attain a volume of traffic similar to that achieved in 1981. Between 1981 and 1985, PWA experienced a significant drop in the number of passengers flown, a drop which represented an average annual decline of 7.3%. In 1985, CPAL had moved basically the same number of passengers as in 1981. All other Level I carriers faced some decline in traffic within the period but by 1985 their traffic had picked up sufficiently to surpass their 1981 level. Wardair, a charter operator, and Nordair, a unit toll operator with important charter activities in its operations, had the most significant percentage increase in their actual number of passengers flown. Eastern Provincial Airways (EPA) and Quebecair, for the period as a whole, showed an average annual growth in passengers of 2.6% and 2.7% respectively while the number of passengers flown by Air Canada grew at a 1.6% average annual rate over the same period. As a whole the overall number of passengers flown by Level I carriers in 1985 was only slightly higher than the level achieved in 1981, which clearly indicates the impact that the slowdown of the economy had on traffic levels.

The traffic trends of recent years have forced air carriers to make adjustments to their operations in order to reflect the new air service needs of passengers. Service patterns and/or networks were adjusted and such

adjustments have impacted on the actual number of hours flown. Air Canada and Quebecair, despite slight increases in the number of passengers flown between 1981 and 1985, actually showed decreases in their number of hours flown. CPAL, despite a decrease in the actual number of passengers flown in 1985 compared to its 1981 passenger traffic level, experienced an increase in number of hours flown over the same period. Nordair's average annual percentage increase in hours flown was twice the average annual increase in its passenger volume, while Wardair experienced over the same years a more significant growth in the actual number of passengers flown than in its hours flown. Overall, the number of hours flown by Level I carriers in 1985 was slightly lower than the hours flown in 1981.

Labour is an essential input in the production of air services and its importance is also reflected on the share of this input within the total costs of carriers' operations. When one looks at Level I carriers, it is possible to observe from Table 1.1 that between 1981 and 1985, labour costs increased at an average annual rate of 4.7%. When the labour cost situation is examined at the carrier's level, CPAL stands out as the Level I carrier which managed to achieve the lowest average annual growth in its labour costs, followed by PWA and Wardair. Air Canada, with a 5.4% annual increase is slightly over the average growth in labour costs observed for all Level I carriers as a group. Nordair, EPA and Quebecair are the three carriers which experienced the highest level of growth in their labour costs. It is of interest to note that carriers with below-average increases in their labour costs achieved such results by reducing, over the period, their number of employees, by offering salary increases below average or by doing both.

Air Canada, CPAL, PWA and Wardair decreased their number of employees in 1985 from the 1981 levels. EPA, Nordair and Quebecair marginally increased their number of employees.

Labour costs and average salaries increased for all Level I carriers. For most carriers the average annual increase in salaries was in the order of 7%.

Because labour is an input under management control, adjustments to this factor as a result of demand changes are expected. In fact, carriers often adopt labour productivity improvement as one of their corporate objectives. Performance improvements, as measured by the number of passengers flown per employee were achieved by all Level I carriers with the exception of PWA. After Wardair, the largest increase in the annual number of passengers flown per employee was achieved by CPAL while Air Canada was the only other carrier with a performance superior to the average performance of all Level I carriers. In terms of hours flown per employee, Quebecair and PWA were unable between 1981 and 1985 to show improvements for this indicator. Wardair and Nordair, with their involvement in charter services, attained for this ratio the highest growth over the period. The two other ratios calculated, labour cost per passenger flown and labour cost per hour flown, are also partial measures of productivity which do not take into account differences in the nature of each carrier's production and, therefore, are not to be used as measures of relative efficiency. But,

Table 1.1

SOME RECENT CHANGES IN LEVEL I CARRIER ACTIVITIES

Average Annual Change Between 1981 and 1985 in:									
Carrier	Passengers Flown	Hours Flown	Number of Employees	Labour Cost*	Average Salaries*	Passengers Flown per Employee	Hours Flown per Employee	Labour Cost	Labour Cost
								per Passenger Flown	per Hour Flown
Air Canada CPAL	1.6%	-0.8%	-2.4%	5.4%	7.8%	4.0%	1.6%	4.0%	6.2%
	-0.1%	1.6%	-3.5%	2.2%	5.7%	9.2%	5.2%	2.3%	0.6%
EPA Nordair PWA Quebecair	2.7%	2.5%	2.4%	9.4%	7.0%	0.3%	0.1%	6.0%	6.9%
	4.2%	8.5%	0.9%	8.1%	7.1%	3.3%	7.5%	3.9%	-0.4%
	-7.3%	-5.2%	-4.4%	2.7%	7.1%	-2.8%	-0.7%	9.5%	7.9%
	2.6%	-3.4%	0.5%	9.9%	9.4%	2.1%	-3.9%	7.4%	13.3%
Wardair**	5.6%	2.9%	-9.4%	3.1%	12.5%	15.0%	12.3%	-2.5%	0.2%
Level I Carriers	0.5%	-0.1%	-2.8%	4.7%	7.5%	3.3%	2.8%	4.1%	4.7%

* Costs are measured in current dollars.

** Wardair's figures do not include general management and administration employees.

basically, these two indicators relate expenditures to output and, as such, show for CPAL a better performance than the one indicated by the previous two indicators, while the reverse is true for EPA.

Table 1.2

PASSENGERS FLOWN PER EMPLOYEE

<u>Carrier</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	632	620	492	495	539
CPAL	501	505	464	420	437
EPA	1 197	1 097	975	1 081	1 182
Nordair	1 028	865	764	601	902
PWA	1 014	1 103	1 084	1 015	1 136
Quebecair	978	867	780	870	899
Wardair	1 210	1 204	956	703	664
Total Level I	696	681	579	555	610

Table 1.3

HOURS FLOWN PER EMPLOYEE

<u>Carrier</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	16.2	15.2	15.1	14.9	15.2
CPAL	15.5	14.5	13.7	12.8	12.6
EPA	30.4	32.6	30.2	30.7	30.3
Nordair	37.3	30.6	28.5	23.1	27.6
PWA	19.8	18.6	18.1	17.7	20.4
Quebecair	29.0	19.4	27.1	29.8	33.9
Wardair	22.9	21.4	16.7	15.4	14.0
Total Level I	18.1	16.6	16.1	15.6	16.2

Table 1.4

LABOUR COST PER PASSENGER FLOWN
(Dollars)

<u>Carrier</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	61	58	69	64	52
CPAL	68	66	70	69	62
EPA	28	31	34	27	22
Nordair	35	40	46	42	30
PWA	38	36	34	35	26
Quebecair	39	42	40	35	29
Wardair	29	29	31	39	32
Total Level I	53	52	58	55	45

Table 1.5

LABOUR COST PER HOUR FLOWN
(Dollars)

<u>Carrier</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	2 364	2 347	2 254	2 108	1 846
CPAL	2 205	2 321	2 377	2 269	2 151
EPA	1 110	1 045	1 095	935	843
Nordair	956	1 117	1 240	1 082	972
PWA	1 972	2 132	2 028	2 000	1 439
Quebecair	1 323	1 868	1 153	1 027	776
Wardair	1 526	1 614	1 777	1 756	1 513
Total Level I	2 054	2 134	2 095	1 975	1 699

SUMMARY OF SCHEDULED CARRIER ACTIVITY

The principal changes occurring in the level of service at Canadian communities in the first quarter of 1986 are shown in Table 1.6 and summarized below. Comparisons are made with the previous quarter and the same quarter of 1985. In order to improve the timeliness of the summary, a description of the principal changes occurring in the second quarter follows that of the first quarter.

Service Changes (First Quarter)

Scheduled capacity increased by 3% from that of the fourth quarter of 1985 as carriers maintained their winter schedules. First quarter capacity has increased 6% over the same period in 1985. Non-jet operations have captured most of the growth, having increased by 33% within the year, while jet operations increased by 2% during the same time period.

Most major hubs exhibited this pattern of moderate expansion with Halifax being the significant exception by registering a 20% gain in capacity since 1985. Vancouver (8%), Ottawa (7%), Winnipeg (4%), Montréal (3%) and Toronto (2%) exhibited more modest growth while capacity actually decreased by 5% at Calgary and by 1% at Edmonton.

Southern Domestic Sector

Changes to seating capacity in the Southern Domestic Sector closely resembled those changes occurring in the total market as seats increased by 3% over the previous quarter and 5% since the previous year.

The most noteworthy event of the quarter was the total integration of Eastern Provincial's network into Canadian Pacific Air Lines' operations on January 15, although the integration did not significantly change service patterns. Canadian Pacific Air Lines also reduced the scale of its premium Attache service by converting its premium flights from Toronto to Halifax and Winnipeg to regular service. Attache service continues, however, between Toronto and Calgary, Edmonton and Vancouver.

Canadian Pacific's regional partner, AirBC of Vancouver, continued its expansion in the B.C. interior by introducing twice daily Dash-7 flights on Vancouver-Castlegar and adding six daily flights on Vancouver-Kelowna. Kelowna is served with a combination of Dash-7 and Dash-8 equipment. Both new services will compete directly against Pacific Western's frequent jet service. Time Air also serves the Vancouver-Kelowna market. AirBC also increased capacity on its routes serving Campbell River, Comox, Port Hardy and Powell River. The carrier introduced new non-stop service between Port Hardy and Vancouver, in direct competition with Pacific Western, by eliminating the Campbell River stop on one of its two daily flights.

Other carriers were also active in the British Columbia market. Skylink added Nanaimo to its network serving the Vancouver and Victoria areas. Piper Navajo equipment is being used on the three daily Nanaimo-Delta and the six daily Nanaimo-Vancouver flights. Nanaimo is also served by AirBC and Burrard Air. Vancouver-based Burrard Air discontinued its Vancouver-

Table 1.6

SUMMARY OF SCHEDULED CARRIER ACTIVITY
FOR WEEK OF FEB. 15-21, 1985 AND 1986

Departures and Seats

	<u>Year</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
		<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	1985	4601	580654	3225	91057	7826	671711
	1986	4808	585081	4609	120479	9417	705560
Northern Domestic Sector	1985	463	45191	1145	27440	1608	72631
	1986	471	46992	1574	38325	2045	85317
Transborder Sector	1985	1192	168420	312	7591	1504	176011
	1986	1315	175254	392	8746	1707	184000
International Sector	1985	302	88249	4	160	306	88409
	1986	312	92246	4	160	316	92406
All Sectors	1985	6558	882514	4686	126248	11244	1008762
	1986	6906	899573	6579	167710	13485	1067283

Percentage Change in Departures and Seats

	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	+4.5	+0.8	+42.9	+32.3	+20.3	+5.0
Northern Domestic Sector	+1.7	+4.0	+37.5	+39.7	+27.2	+17.5
Transborder Sector	+10.3	+4.1	+25.6	+15.2	+13.5	+4.5
International Sector	+3.3	+4.5	0.0	0.0	+3.3	+4.5
All Sectors	+5.3	+1.9	+40.4	+32.8	+19.9	+5.8

Sechelt flights, leaving this route without air service. In the B.C. interior, Shushwap Flight Center introduced three daily flights between Kelowna and its Salmon Arm base with De Havilland Otter equipment.

In the prairie region, Norcanair of Saskatoon joined the ranks of jet carriers by introducing Fokker F-28 service to Prince Albert, Regina and Saskatoon to replace flights that were previously operated with turboprop equipment. Pacific Western discontinued its daily Winnipeg-Calgary non-stop flight. Air Canada continues to provide non-stop service while Pacific Western continues direct service with a stop at Regina or Saskatoon. Perimeter Airlines of Winnipeg stopped the only scheduled service to Yorkton, which had been served from Winnipeg with a stop at Dauphin.

Austin Airways of Timmins added Elliot Lake as a stop on its daily Marathon-Toronto flight, supplementing the Torontair service on the Toronto-Elliot Lake market. Torontair discontinued service to Brockville and Toronto's Buttonville airport, leaving both of these airports without a scheduled carrier. Elsewhere, no major changes occurred in the regional Quebec and Atlantic Provinces markets.

Northern Domestic Sector

In the last issue of the Air Transport Monitor, we referred to Northwest Territorial Airways' discontinuation of service at Hall Beach as a complete loss of service to points towards the west. In fact, First Air continues to provide weekly service from Hall Beach to Pelly Bay and Repulse Bay.

Seating capacity in the North increased 11% from the previous quarter and 17% over the previous year. About half of the increase was artificial as two carriers began publishing schedules to points previously served under Class 3 licenses. Air Inuit began publishing schedules for eleven communities in the Ungava and Hudson Bay region. Similarly, Calm Air published schedules for sixteen new communities in northern Manitoba. Real growth in the Northern Domestic Sector was 5% over the previous quarter and 11% over the previous year after the adjustment for the simple changes in service classes.

First Air introduced two weekly HS-748 flights between Frobisher Bay and Ottawa in direct competition with Nordair's weekly Boeing 737 non-stop and subsequently upgraded this service to three flights a week with a mixed passenger/cargo configuration Boeing 727.

Yellowknife-based Northwest Territorial reduced its service to Fort Simpson on the MacKenzie River by discontinuing its weekly Fort Simpson-Wrigley-Norman Wells and Fort Simpson-Fort Nelson (B.C.) services. No other carrier is serving Wrigley. However, the carrier is maintaining its daily service between Fort Simpson and Yellowknife. Buffalo Airways also discontinued its twice weekly Fort Simpson-Hay River-Pine Point-Fort Smith flight. Pine Point receives no other scheduled service.

Further south, Austin Airways added Cat Lake to its extensive operations in Northwestern Ontario. The three weekly flights to Sioux

Lookout are operated with light propeller equipment. In British Columbia, North Cariboo discontinued its daily Prince George-Chetwynd-Dawson Creek-Fort St. John service. North Cariboo was the only carrier providing scheduled service at Chetwynd.

Transborder Sector

Seating capacity in this sector was stable as it decreased only by 1% from the previous quarter. Capacity over the previous year, however, has increased by some 5%.

Canadian Pacific Air Lines reintroduced seasonal, non-stop service from Honolulu to Calgary and Edmonton with both cities in Alberta receiving a weekly non-stop flight with wide-bodied DC-10 equipment.

New services were also introduced under the Local and Regional Notes. Lake Union Air Service initiated three daily floatplane roundtrips linking the harbours of Victoria and Seattle while Commuter Express of Toronto added Toledo to its transborder operations by introducing two non-stop flights from Toronto with Swearingen Metro equipment. Additional direct service to Toledo is provided with a stop at Columbus or Dayton. Mall Airways introduced two daily flights between Montréal and Rochester (N.Y.) using Beech 99 equipment.

International Sector

International capacity increased by 6% over the previous quarter as carriers added seasonal capacity to the Caribbean. From the previous year, capacity in this sector has increased by 5%. No significant changes occurred in the international sector during the first quarter in 1986.

Service Changes (Second Quarter)

The principal changes occurring in the level of service at Canadian communities are shown in Table 1.7 and summarized below. In addition, Figure 1.1 illustrates service and competitive levels of domestic services at the large, medium and small hubs. The area of each circle is intended to be proportional to the domestic seating capacity of the airport. Each circle is subdivided according to the capacity shares of the three largest carriers serving the airport. All remaining carriers are aggregated as "other". A carrier share includes operations performed by another carrier but under a common designator code.

Modest capacity increases were in order as carriers began to replace their winter schedules with new summer schedules. Seating capacity increased 2% from that of the first quarter of 1986, and showed a 5% increase over the second quarter of 1985. Non-jet operations provided virtually all of the growth, registering a 36% increase since last year, as jet operations remained at their 1985 levels.

The seating capacity at the major hubs show mixed results. Halifax's 19% increase over the year reflects Canadian Pacific's expansion of services during the third quarter of 1985. Expo '86 was no doubt a

Table 1.7

SUMMARY OF SCHEDULED CARRIER ACTIVITY
FOR WEEK OF MAY 15-21, 1985 AND 1986

Departures and Seats

	<u>Year</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
		<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	1985	4764	594136	3659	99880	8423	694016
	1986	4881	589322	5189	139730	10070	729052
Northern Domestic Sector	1985	481	47166	1128	27663	1609	74829
	1986	471	43978	1513	36203	1984	80181
Transborder Sector	1985	1237	166565	307	7241	1544	173806
	1986	1284	170994	411	7549	1695	178543
International Sector	1985	331	101852	4	160	335	102012
	1986	360	106342	4	160	364	106502
All Sectors	1985	6813	909719	5098	134944	11911	1044663
	1986	6996	901936	7117	183642	14113	1094278

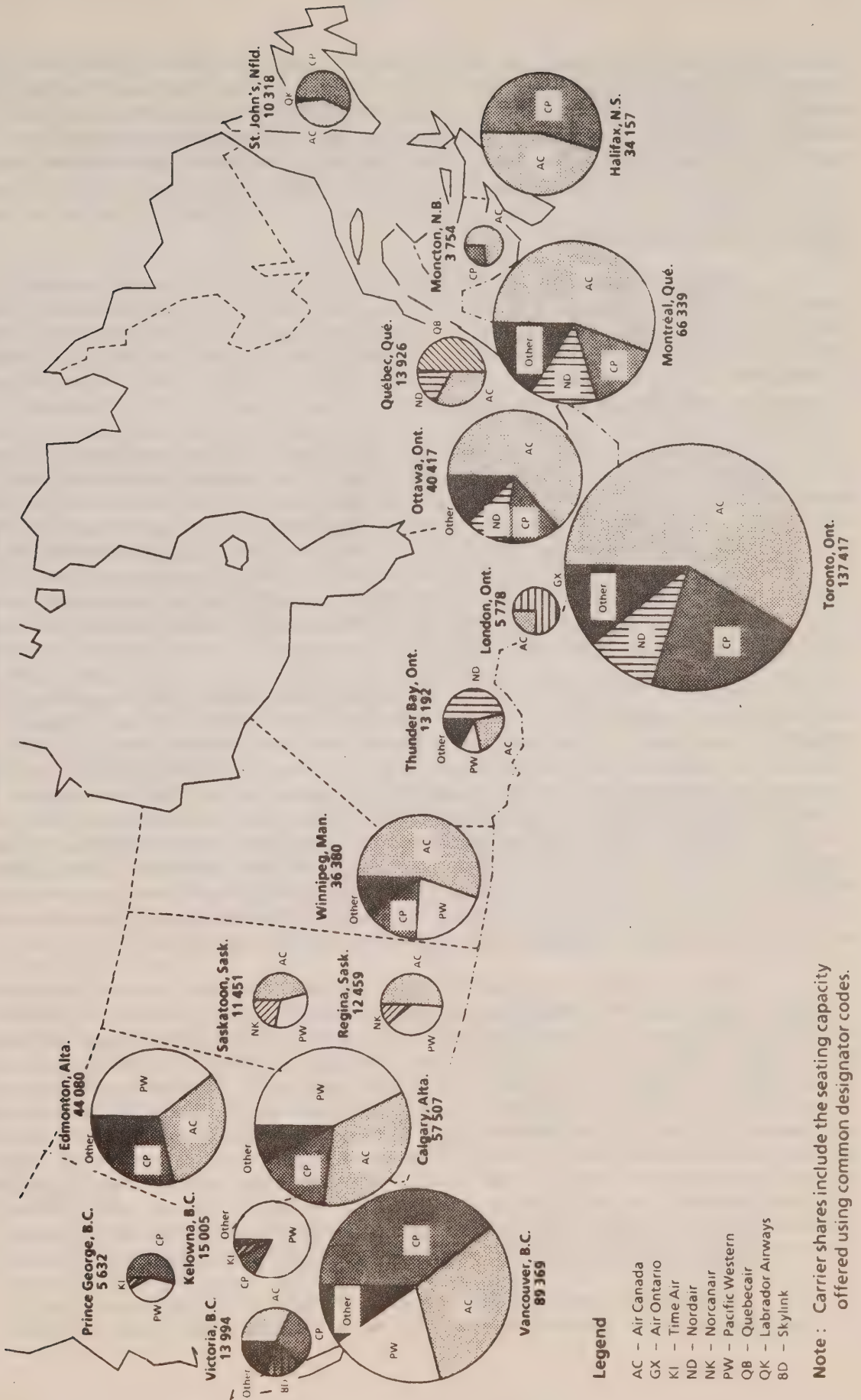
Percentage Change in Departures and Seats

	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	+2.5	-0.8	+41.8	+39.9	+19.6	+5.0
Northern Domestic Sector	-2.1	-6.8	+34.1	+30.9	+23.3	+7.2
Transborder Sector	+3.8	+2.7	+33.9	+4.3	+9.8	+2.3
International Sector	+8.8	+4.4	0.0	0.0	+8.7	+4.4
All Sectors	+2.7	0.1	+39.6	+36.1	+18.5	+4.7

Figure 1.1

SCHEDULED CARRIER ACTIVITY AT MAJOR SITES: DOMESTIC SERVICES ONLY

Seats Offered during the Week of May 15-21, 1986



significant factor in explaining Vancouver's 16% increase. Winnipeg (7%) and Toronto (4%) also exhibited significant growth. Capacity at Montréal remained relatively stable while seats decreased by 4% at Ottawa, 6% at Edmonton and 9% at Calgary. The capacity decline at Ottawa probably represents a correction to past expansion while economic conditions are the principal causes of decline at Calgary and Edmonton.

Southern Domestic Sector

Seating capacity in the Southern Domestic Sector increased by 3% from the previous quarter and 5% in the past year. At the national level, the only significant change was the re-introduction of Canadian Pacific's weekday Montréal-Ottawa-Vancouver service. The stop at Ottawa is eliminated on weekends. The new service competes directly against Air Canada's non-stop flights to both Montréal and Ottawa.

Two new carriers established service in the Atlantic Provinces. Air Atlantic, operating under Canadian Pacific's code, introduced Dash-7 service from Charlottetown, Fredericton, Moncton and Saint John to Halifax. The carrier also introduced intra-island Newfoundland flights linking Deer Lake, Gander and Stephenville with St. John's. The daily Stephenville flight also continues on to Halifax. Air Atlantic's operations are intended to replace part of Canadian Pacific's short-haul services within the Atlantic Provinces. Labrador Airways also introduced a daily St. John's-Deer Lake-Stephenville flight using Saunders ST-27 aircraft.

Nordair Metro, operating in association with Nordair, introduced new service at Bagotville, Montréal, Ottawa, and Québec using Convair turboprop equipment. The carrier offered service between Montréal and the three other communities, as well as offering direct Ottawa-Québec service. Quebecair reduced capacity on those routes where it has now to compete directly against Nordair Metro by substituting smaller turboprop equipment for jet aircraft, maintaining by the same token the frequency of its service. Quebecair's daily service to Rouyn and Val d'Or was rerouted from Québec to Montréal. The carrier also sought to strengthen its regional presence by entering into a joint marketing agreement with Quebec Aviation. The regional carrier serves eight communities in Québec as well as Ottawa.

City Express introduced eight weekday flights between Montréal and Toronto Island Airport when it accepted delivery of new Dash-8 equipment. Capacity shortages had previously limited the carrier to weekend service only. City Express also reintroduced domestic service to Hamilton by adding three daily flights to Toronto Island and two daily flights to Ottawa. Both of these new services are operated with Grumman Gulfstream and Saunders ST-27 equipment. Torontair augmented capacity by introducing 42 seat Fairchild-Hiller 227 equipment on a Toronto-Trenton-Kingston route replacing Beech 99 aircraft previously used on the route. The carrier discontinued its Ottawa-Trenton service. A new carrier, Inter City Airways, inaugurated three daily Oshawa-Windsor flights with HS-748 equipment which competes directly with the service recently introduced by Skycraft Air Transport.

Air Canada reorganized its Northwestern Ontario routes by introducing a daily Toronto-Sault Ste. Marie-Thunder Bay-Winnipeg DC-9

service. The new service represents Air Canada's first westbound service from Sault Ste. Marie and its re-entry into the Thunder Bay-Winnipeg market. However, the carrier reduced its Toronto-Sault Ste. Marie service to a single flight. Air Ontario discontinued its recently inaugurated Ottawa-Sudbury-Thunder Bay route. Nordair continues to serve this route as well as providing extensive service to other points in the region. Air Ontario continues to serve the Sudbury-Thunder Bay market with flights on Fridays and Sundays.

While Time Air discontinued service on its Edmonton (Municipal)-Lloydminster-Saskatoon route, service to these points continues to be provided by Norcanair. Air Alberta ceased all operations, thereby resulting in the complete loss of service to Red Deer.

Adastra Aviation began new local service in the Okanagan/Kootenay region in British Columbia, with a daily roundtrip between Castlegar and Cranbrook and another flight on the Castlegar-Penticton-Kelowna-Castlegar circuit. Both services are flown with Cessna aircraft. The high level of activity continued in the Vancouver Island region with Air Canada supplementing its twice daily Vancouver-Victoria jet flights by entering into a joint marketing agreement with Time Air. In addition, Skylink increased frequency and capacity on the same route by introducing 19-seat Embraer Bandeirante equipment. The increased frequency ensures an hourly service for Skylink, with even higher frequencies during the peak periods of the day. At the same time, Skylink discontinued its recently introduced Nanaimo-Vancouver route. Total capacity on this route remained unchanged, however, as Aquila Air introduced ten daily Cessna flights.

Northern Domestic Sector

Seating capacity in the Northern Domestic Sector decreased by 6% from the previous quarter. All of this decline is attributable to only a few frequency or aircraft size reductions which did not significantly alter the level of service to the affected communities. Northern capacity was 7% above 1985 levels although all of the increase was artificial since 1986 data include some services that were operated in 1985 on a non-scheduled basis. Seating capacity actually decreased by 3% when the former Class 3 services are accounted for.

Labrador Airways began publishing a schedule for its former Class 3 route which serves Gander, St. Anthony and Blanc Sablon. The three weekly flights, using Saunders ST-27 equipment continues from Gander to St. John's. Similarly Trans North Turbo Air added two weekly flights to Faro and Ross River from its Whitehorse base. Both flights are operated with Cessna equipment.

Transborder Sector

Seating capacity declined by 3% from the previous quarter as carriers substituted smaller equipment on routes to the Southern United States. Capacity was, however 2% above 1985 levels.

The smaller carriers continued to take advantage of the relaxed regulation of regional transborder services. Two American carriers, Lake Union Air Service and Otter Air, introduced three daily floatplane flights between the harbours of Vancouver and Seattle with Otter Air's flights also stopping at Friday Harbor on Puget Sound. Austin Airways, which serves the Minneapolis-Thunder Bay market, also introduced a daily Beech 99 flight between Kenora and Minneapolis. Horizon Air of Seattle began serving the Calgary-Spokane market after the incumbent carrier, Cascade Airways, declared bankruptcy. Albany-based Mall Airways discontinued its recently inaugurated Ottawa-Syracuse service but this market continues to be served by Piedmont's three daily jet flights.

Presidential Airways began a twice daily Boeing 737 service linking Montréal Mirabel Airport to its Washington Dulles hub. The new service was introduced under the Experimental Airports Program. Air Canada discontinued its non-stop Montréal-Chicago flight but continues to offer direct service with a stop at Toronto. American Airlines, however, continued to offer a non-stop service in this market. Air Canada also reduced frequency on its daily Montréal-Tampa service. The carrier retained its non-stop flights on weekends but is providing direct service on weekdays with a stop at Toronto. The carrier is expected, however, to resume non-stop weekday service next winter. Quebecair discontinued most of its transborder operations. The carrier eliminated its weekend Québec-Newark service and reduced its Montréal-Boston service to weekend flights. However, frequent connecting service is offered in the Québec-New York market while Delta continues to offer five daily flights in the Montréal-Boston market. Continental Airlines stopped operations to Edmonton on its Calgary-Dallas/Houston route. However, Pacific Western has agreed to offer connecting service to Continental's flights at Calgary.

International Sector

Seating capacity in the international sector increased by 15% from the previous quarter as carriers prepared for peak travel season. Capacity is 4% above last year's level.

KLM began serving the Vancouver-Amsterdam market with two weekly flights, one of which stops at Calgary. The Netherlands obtained the route in the bilateral treaty concluded last fall. At the same time, CPAL re-introduced service to the Netherlands from both Montréal and Halifax. It is unclear, however, whether both routes will be operated on a year-round or a seasonal basis.

A new bilateral treaty with Brazil permitted Varig to introduce a weekly Sao Paulo-Rio de Janeiro-Toronto-Montréal service. A revision to another existing bilateral agreement permitted Czechoslovakian Airlines to extend its weekly Montréal-Prague service to Toronto.

Canadian carriers also added new points under existing bilateral services. CPAL introduced a weekly non-stop Vancouver-Shanghai flight while Air Canada began serving Manchester as an extension of its Toronto-Glasgow service. Gander lost its international services when Air Canada transferred its Gander-London flights to St. John's.

DOMESTIC AND TRANSBORDER AIR FARE INDICES

This section presents a brief discussion of air fare indices both in the domestic and transborder markets. These indices are summarized in Table 1.8 and also illustrated in Figures 1.2 and 1.3.

With respect to the domestic indices, both the economy and discount fares showed a pattern in the first quarter of 1986 similar to the one observed for the same quarter in earlier years. Mainly the fare changes experienced in the first quarter of 1986 were negligible when compared to the previous quarter. In fact, for both fare types, the changes observed were not significant enough to reflect in a change from their previous quarter's levels.

This issue also presents an analysis of transborder economy and discount fare indices for 1983, 1984 and the first quarter of 1985. These indices are based on the top 75 city pairs in the transborder market as ranked by traffic volume in 1983 and 1984. The economy fare index is based on the lowest economy fare offered by the dominant Canadian or American carrier (dominance being defined in terms of passenger volume) for each of the 75 city pairs. The discount fare index is based on the lowest available non-status fare for each city pair again offered by either a Canadian or an American carrier.

It is clear that the pattern with respect to transborder fare indices is quite different from that in the domestic market. As is shown in Table 1.8 and Figure 1.3, the transborder economy fare index shows hardly any increase between the first quarter of 1983 and the first quarter of 1985, while the discount fare index fluctuated widely and quite regularly, moving up in the first and third quarters and down in the second and fourth quarters. Over the two-year period as a whole, both fare types have risen much more slowly than the CPI. Thus, while the latter increased by some 9%, transborder economy fares rose by only 1% while discount fares have actually dropped by 1%.

Table 1.8

PRICE INDICES FOR DOMESTIC AND TRANSBORDER
SCHEDULED AIR SERVICES
(1st quarter of 1983 = 100)

	Domestic		Transborder		
	<u>Economy Fare</u>	<u>Discount Fare</u>	<u>Economy Fare</u>	<u>Discount Fare</u>	<u>CPI</u>
<u>1983</u>					
Q1	100.0	100.0	100.0	100.0	100.0
Q2	101.6	114.7	100.0	79.1	101.4
Q3	101.6	119.8	100.0	103.6	103.0
Q4	106.7	108.4	100.0	72.2	103.9
<u>1984</u>					
Q1	106.8	108.5	100.0	104.1	105.2
Q2	106.8	126.0	100.3	100.6	106.1
Q3	106.8	126.1	100.3	116.0	107.1
Q4	111.2	118.3	101.1	84.3	107.8
<u>1985</u>					
Q1	111.9	114.5	101.1	99.1	109.1
Q2	114.5	117.0*			110.3
Q3	114.4	136.8*			110.3
Q4	116.9*	119.7*			112.3
<u>1986</u>					
Q1	116.9	119.7			113.7

* Figures have been revised from Air Transport Monitor, Vol. 2, No. 2, May 1986 due to revised weights (annual instead of first three quarters of 1985) used to calculate indices.

FIGURE 1.2
PRICE INDICES

DOMESTIC AIR SERVICES

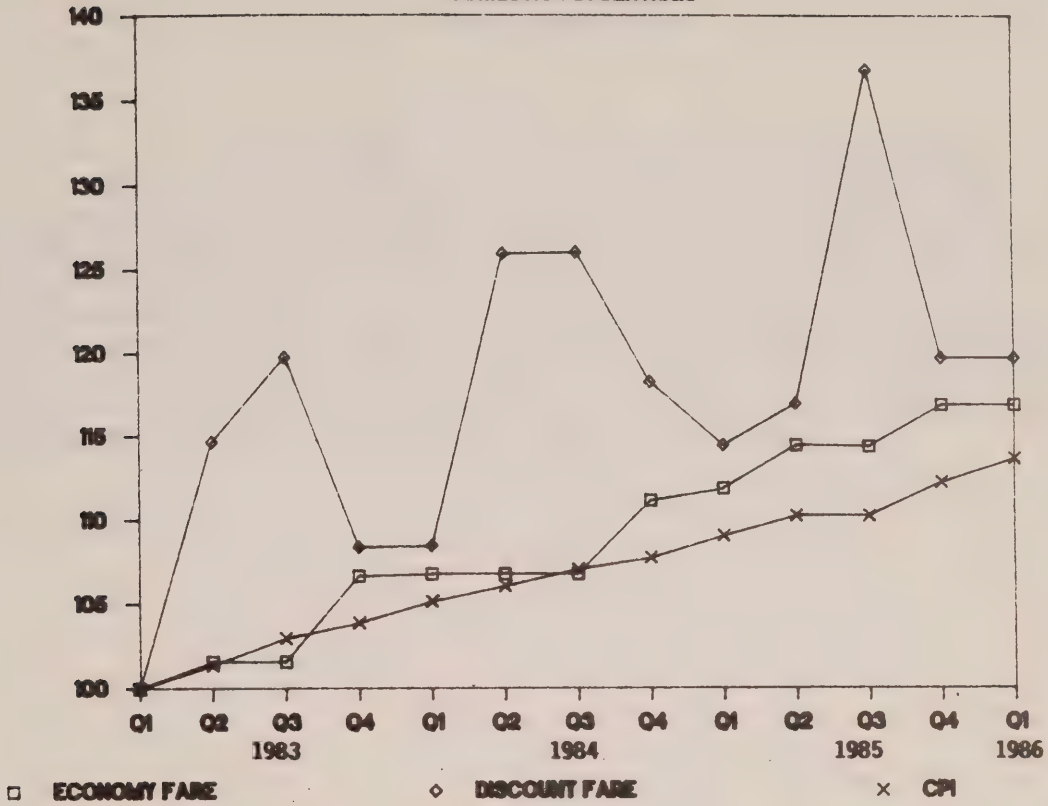
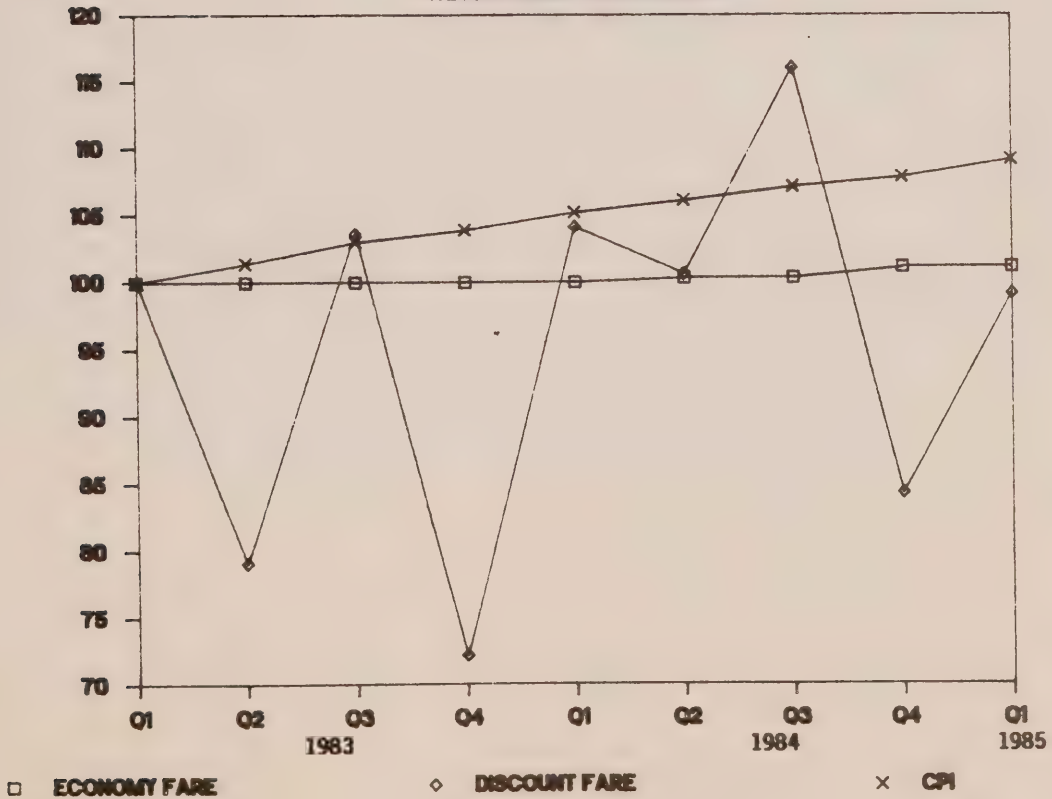


FIGURE 1.3
PRICE INDICES

TRANSBORDER AIR SERVICES



PART II

MARKET ANALYSIS

This part of the report presents a discussion of scheduled air services and prices in the Central (Ontario and Québec) and Northern markets. With respect to the Central market, the discussion covers scheduled services within Ontario and Québec and between major centres in this region and selected points outside. The discussion of air fares provides a brief look at the movement of prices in the Central market over the past three years as well as an examination of various air fares on comparable Canadian and U.S. routes during the first quarter of 1986. As far as the Northern market is concerned, the discussion covers scheduled services in this region as well as the movement of prices in this market from 1983 to 1986.

SCHEDULED AIR SERVICES IN CENTRAL CANADA

This section provides a description of scheduled air services offered in Central Canada in the first half of 1986. The analysis is carried out for the weeks of February 15-21 and May 15-21. In order to identify recent changes in air services, a comparison is also made with services offered during the same weeks in 1985.

Figures 2.1 and 2.2 provide a schematic representation of scheduled air services operated in Central Canada during the week of February 15-21 in 1985 and 1986 respectively. Before proceeding to a discussion of the services illustrated in these figures, the following cautionary points should be borne in mind. First of all, the figures do not provide any indication either with regard to the frequency of service between points or the number of carriers serving them. Thus, a flight provided once a week is shown as the same manner as a service with a frequency of three flights per day. Similarly, a service provided by a single carrier is depicted the same way as services provided by a single carrier. It should also be noted that the figures show not only those routes within the provinces of Ontario and Quebec, but also the ones to adjacent regions.

Due to the geographical expanse of this region as well as the number and variety of air services offered, Central Canada, for purposes of this analysis, has been divided into three sub-regions, namely:

- (i) Québec-Windsor Corridor
- (ii) Northern Ontario
- (iii) Québec.

Each sub-region exhibits somewhat different market characteristics which is reflected in the degree of competition and the type and nature of service provided. The variety in the types of service offered ranges from the low density, local service network covering Northern Ontario to the high density, competitive type operation offered in the Québec-Windsor corridor.

In the second quarter of 1986, some 57 communities in Central Canada received scheduled air services, including the two highest volume city pairs, Toronto-Montréal and Toronto-Ottawa. A number of cities, of which Toronto and Montréal are the most important, serve not only as centres for travel within the Central Canada region, but as gateways for travel to other regions in Canada and beyond. The following table indicates the number of communities receiving scheduled air service as of the second quarter of 1986.

Table 2.1

Number of Points Receiving Non-Stop Scheduled Service
from Major Cities in Central Canada

<u>City</u>	<u>Within Central Canada</u>	<u>Other Canada</u>	<u>Transborder</u>
Toronto	18	11	23
Montréal	13	12	17
Ottawa	12	7	4
Québec	10	2	-
Thunder Bay	9	5	1
Sudbury	8	-	-

Toronto and Montréal are also the major gateways in terms of international destinations offering non-stop connections to 21 and 23 points respectively during the second quarter of 1986.

There were 24 Canadian air carriers operating scheduled services within Central Canada in the second quarter of 1986. New carriers providing service in 1986 include Air Alma, Inter City Airways, Les Ailes de Charlevoix, Nordair Metro, and Skycraft Air Transport. Quebec Aviation discontinued scheduled operations early in 1986 but all routes were transferred to Propair.

(i) Québec-Windsor Corridor

Scheduled air services within the Québec-Windsor corridor are distinguished by the high level of frequency offered on some of its city pairs. Canada's two highest volume routes, Montréal-Toronto and Ottawa-Toronto, are located in the region but other routes are also important. Such high traffic volumes, along with competition from other transport modes, have resulted in frequency levels that are not generally found in other parts of the country. Furthermore, such large traffic volumes encourage a greater degree of competition.

The basic characteristics of the regional market are summarized in Table 2.2. The trends occurring in the Québec-Windsor corridor closely resemble those occurring in short-haul markets elsewhere in Canada; regional non-jet operators have supplied most of the newly added capacity in 1986 while the larger carriers are offering basically the same service levels as they did in 1985. This pattern is most evident in the average seats per departure which declined from 91 seats in 1985 to 82 seats in 1986. Similarly, the larger carriers' share of seat-kilometers declined from 92% to 87% in the same time period.

Despite the inroads made by the smaller carriers, the major carriers continue to dominate the market. The largest of these, Air Canada, is offering basically the same service levels and route patterns as it did in

Figure 2.1
SCHEDULED AIR SERVICES IN QUÉBEC AND ONTARIO
For week of February 15-21, 1985

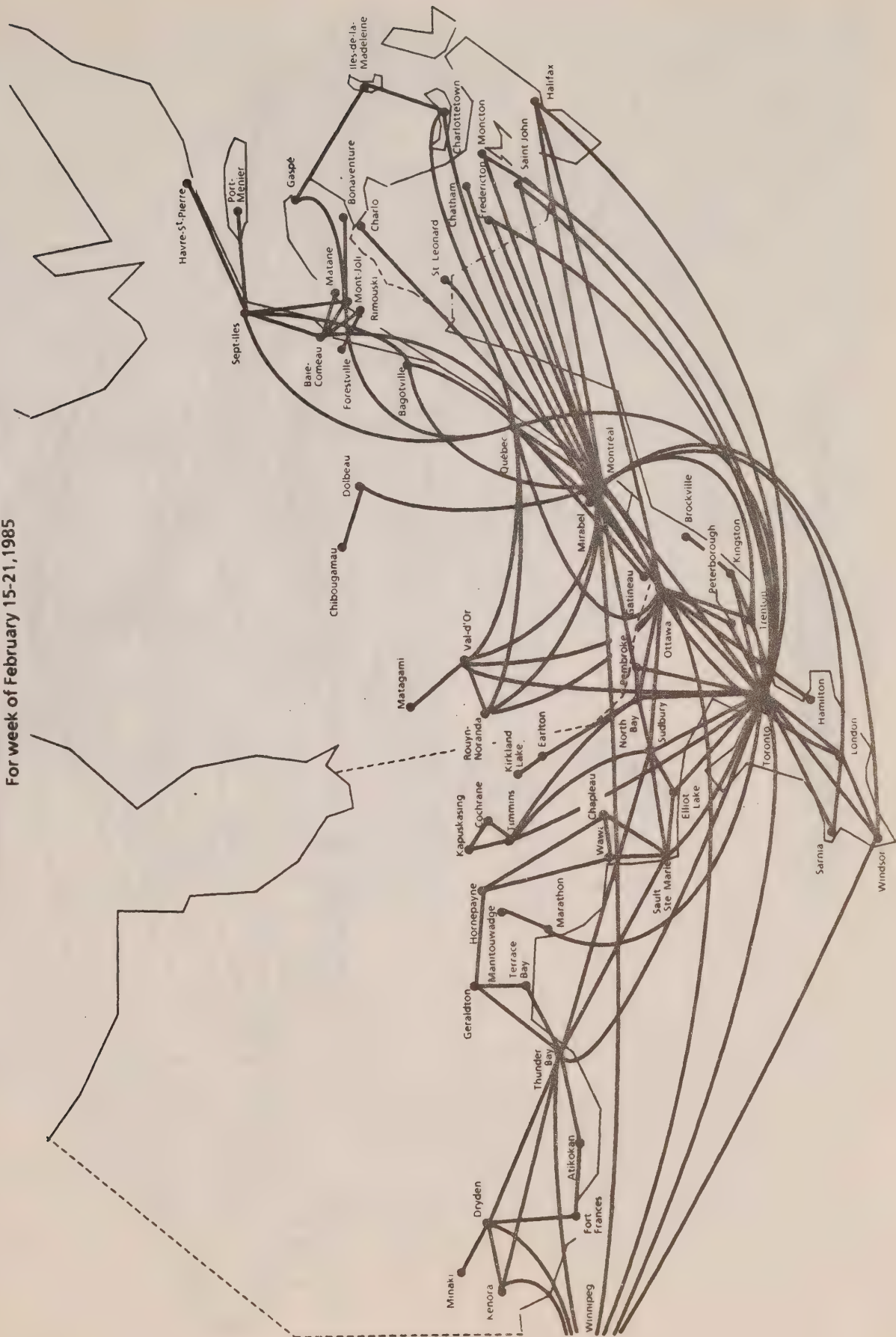


Figure 2.2
SCHEDULED AIR SERVICES IN QUÉBEC AND ONTARIO
For week of February 15-21, 1986



Table 2.2

SCHEDULED CARRIER ACTIVITY¹
QUÉBEC-WINDSOR CORRIDOR

Regional Summary	1985	1986	% Change
Carriers	9	14	35.7%
Airports Served	16	17	5.9%
City pairs Served	28	27	-3.7%
Departures per Week	1753	2017	13.1%
Seats per week	159697	165492	3.5%
Seat-km. per Week (x1,000)	59312	61521	3.6%
Average Seats per Departure	91.1	82.0	-11.0%
Average Stage Length (km.)	322.6	337.3	4.4%

Carrier Shares	Departures		Seats		Seat-km.	
	1985	1986	1985	1986	1985	1986
Air Canada	39.59%	35.65%	57.87%	52.90%	61.68%	57.17%
Nordair	13.35%	7.29%	13.04%	10.42%	13.61%	11.70%
Canadian Pacific Air Lines	7.30%	7.49%	9.75%	9.95%	11.50%	11.25%
Quebecair	6.27%	4.96%	6.54%	7.02%	5.21%	6.42%
City Express	9.01%	15.12%	4.24%	6.20%	3.88%	5.80%
Air Ontario	10.67%	9.77%	5.85%	5.95%	2.80%	2.80%
Nordair Metro ²	-	5.35%	-	3.13%	-	2.09%
Inter City Airways	-	1.59%	-	0.77%	-	0.79%
Skycraft Air Transport	-	2.97%	-	0.63%	-	0.67%
Torontair	9.24%	4.56%	1.52%	1.88%	0.59%	0.63%
Propair ³	-	2.78%	-	0.38%	-	0.31%
First Air	1.60%	1.39%	0.70%	0.68%	0.25%	0.24%
Pem Air	-	0.99%	-	0.08%	-	0.10%
Voyageur Airways	-	0.10%	-	0.02%	-	0.02%
Québec Aviation	2.97%	-	0.49%	-	0.47%	-

Notes: 1. Scheduled carrier data are for the weeks of May 15-21, 1985 and 1986.

2. Nordair Metro operates under Nordair's designator code.

3. Propair operates under Quebecair's designator code.

Source: Official Airline Guide.

1985. Air Canada's regional routes fulfill the major functions of carrying the local traffic and of feeding passengers to the carrier's domestic and international network. The bulk of Air Canada's capacity is concentrated in its Rapidair service which serves both the Montréal-Toronto and Ottawa-Toronto markets. Both city pairs are served with an hourly frequency with Boeing 727 or McDonnell DC-9 aircraft although peak hour capacity is supplemented with wide-body equipment. The reduction of service during the weekend is characteristic of most short-haul routes. The McDonnell Douglas DC-9 provides most of the service on Air Canada's other regional routes. Thus, Air Canada offers four daily flights in the Toronto-Windsor market. Air Canada serves Québec with three flights to Montréal, two flights to Toronto and a flight to Ottawa. A daily Montréal-Ottawa-London-Windsor flight completes Air Canada's regional services. Frequent service is also offered between Montréal and Ottawa but those flights tend to continue to destinations elsewhere in Canada.

Canadian Pacific Air Lines (CPAL), Nordair and Quebecair provide most of the competing service with Air Canada, all three carriers flying Boeing 737 equipment. CPAL and Nordair each offer significant frequency levels in competition with Air Canada's Rapidair service. However, CPAL's flights from Montréal and Ottawa are designed to feed traffic to the carrier's other domestic flights at Toronto. In contrast, the Nordair flights primarily serve the local market. Nordair also offers three daily flights in the Toronto-Windsor market. Quebecair is Air Canada's main competitor in the Montréal-Québec market where the airline offers five daily flights. Most of Quebecair's flights continue to other destinations in Québec. Quebecair also serves Toronto with three daily flights from Montréal.

The regional non-jet carriers increased their share of seat-kilometers from 8% in 1985 to 13% in 1986. Such expansion was accomplished through a variety of strategies. Much of the expansion also occurred in markets that were already served by the major carriers. Nordair Metro, partly owned by Nordair, adopted the most direct approach when it introduced service between Montréal and Québec early in 1986. The carrier has chosen to compete directly with Air Canada and Quebecair by offering superior frequencies with fifty seat turboprop equipment. Thus, the carrier is serving Montréal-Québec with seven daily flights. Two of those flights continue to Ottawa.

City Express has emerged as a significant competitor with its operations out of Toronto Island Airport. Formerly Air Atonabee, the carrier inaugurated service to Ottawa in September 1984 with eight daily Dash-7 flights. More recently, City Express expanded its Montréal-Toronto service by adding seven weekday flights with newly delivered Dash-8 equipment. City Express' principal advantage is that it serves Toronto Island Airport which is situated near downtown.

Other regional operators also compete directly against the major carriers on low-frequency routes. Air Ontario offers a daily Montréal-Ottawa-London flight, a market also served by Air Canada. The service uses fifty seat turboprop equipment. Propair uses smaller equipment on its service between Québec and Ottawa. Propair, which offers its services in

association with Quebecair, also serves Québec-Gatineau. Both services were formerly provided by Quebec Aviation.

Much of the newly added capacity went to major population centers that are not located near a principal airport. City Express has re-introduced the Hamilton-Ottawa service left vacant when Nordair abandoned its service early in 1985. The carrier provides additional service to Hamilton with three daily flights from Toronto Island Airport. Inter City Airways and Skycraft Air Transport both chose to develop Oshawa as the base of their operations. Both carriers have introduced new services to Montréal, Ottawa and Windsor. Oshawa's airport is conveniently located near some of Toronto's suburbs.

A substantial portion of regional carrier operations also complement the major carriers' services. For example, Air Ontario provides frequent service between Toronto and London thus giving the latter city connecting service to a wide variety of domestic and international destinations. Air Ontario also furnishes the only scheduled air service between Toronto and Sarnia although most flights stop at London. Torontair, recently acquired by Austin Airways, provides service from Toronto to Trenton and Kingston. Torontair had also served Brockville and Ottawa until early in 1986. Pem Air serves the Cornwall-Toronto market with a single daily flight. Propair has recently discontinued the only scheduled air service to Sherbrooke. Sherbrooke had been served from Montréal and Québec. Finally, First Air's two daily flights connect Ottawa with the numerous international flights departing Montréal's Mirabel Airport.

(ii) Northern Ontario

Northern Ontario is geographically the largest region in Central Canada with its land mass stretching the width of the province from Kenora in the west to Pembroke in the east. The region's communities are, for the most part, resource based and for many of them, because of long distances and rugged terrain, air transport provides a vital inter-community link. The region's size and the dispersion of traffic have resulted in the development of a strongly hierarchal air transport network. The largest cities, such as Sudbury and Thunder Bay, are linked to Toronto while the smaller communities are in turn connected to the larger regional centers.

At first glance, Table 2.3 would suggest that there has been little change to air service within the region since 1985. However, the inspection of the carrier shares reveals that there has been a significant shift in capacity from Air Canada to Air Ontario, Austin Airways and Nordair. This shift in capacity did not affect the basic indicators of average capacity per departure or average stage length.

Toronto acts as the principal gateway to the region and the market has historically been dominated by Air Canada. The carrier offers a total of ten flights a day from Toronto to the principal destinations in Northern Ontario. Most flights are performed with McDonnell Douglas DC-9 equipment. Three flights a day are offered to North Bay, Sudbury and Thunder Bay. The North Bay flights continue on to Timmins. The remaining flight leaving Toronto continues to Sault Ste. Marie, Thunder Bay and Winnipeg. Most of the

Table 2.3

SCHEDULED CARRIER ACTIVITY
NORTHERN ONTARIO

Regional Summary	<u>1985</u>	<u>1986</u>	<u>% Change</u>
Carriers	11	11	-
Airports Served	28	28	-
City pairs Served	48	46	-4.2%
Departures per Week	1170	1251	6.9%
Seats per week	58852	62815	6.7%
Seat-km. per Week (x1,000)	25829	27226	5.4%
Average Seats per Departure	50.3	50.2	-0.2%
Average Stage Length (km.)	313.4	321.7	2.6%

Carrier Shares	<u>Departures</u>		<u>Seats</u>		<u>Seat-km.</u>	
	<u>1985</u>	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>	<u>1986</u>
Nordair	13.93%	14.79%	32.96%	35.05%	38.11%	41.35%
Air Canada	18.29%	14.63%	38.92%	30.72%	43.13%	34.37%
Austin Airways	14.79%	20.70%	5.63%	10.10%	4.53%	6.42%
Air Ontario	3.25%	5.60%	3.23%	5.57%	2.34%	5.70%
Pacific Western Airlines	1.03%	0.96%	2.43%	2.27%	5.03%	4.77%
norOntair	29.83%	29.10%	12.68%	12.21%	4.15%	4.60%
Voyageur Airways	6.24%	5.44%	1.52%	1.93%	0.86%	1.15%
Torontair	2.39%	2.88%	0.71%	0.86%	0.61%	0.75%
Bearskin Lake Air Service	2.91%	2.72%	0.87%	0.81%	0.65%	0.62%
Pem Air	6.84%	2.72%	0.95%	0.38%	0.57%	0.27%
Georgian Bay Airways	0.51%	0.48%	0.10%	0.10%	0.01%	0.01%

Note: Scheduled carrier data are for the weeks of May 15-21, 1985 and 1986.

Source: Official Airline Guide.

decline in Air Canada's share of seat-kilometers from 43% in 1985 to 34% in 1986 is due to the discontinuation of service on the Ottawa-Sudbury-Thunder Bay route.

Nordair provides most of the remaining major carrier service in the region. Although Nordair now offers more capacity than Air Canada, its Boeing 737 operations are concentrated in Sault Ste. Marie and Thunder Bay. The airline offers a total of seven departures a day to the two destinations from Toronto. In addition, Nordair has replaced Air Canada's daily Ottawa-Sudbury-Thunder Bay service. Nordair also provides the only jet service to Dryden by offering two daily flights each to Thunder Bay and Winnipeg. The airline also offers a daily Thunder Bay-Winnipeg service. Pacific Western Airlines is the other major carrier serving the region although its operations are more transcontinental in nature. Its daily Toronto-Thunder Bay service continues to Brandon and Calgary.

In terms of communities served, norOntair has the most extensive network within Northern Ontario. Nine of the 20 communities served by norOntair receive no other scheduled air service. norOntair's fleet of Twin Otter and Dash-8 aircraft serve two purposes. Firstly, norOntair feeds traffic from the smaller communities to the major carrier operations at the larger centres. Secondly, norOntair provides much of the local service between the larger centres that are not served by the major carriers.

Other carriers provide local service within Northern Ontario. Austin Airways' fleet of HS-748, Beech 99 and Cessna aircraft serves nine communities in the area from Timmins west to Kenora. Austin Airways also provides local service on flights departing Timmins and Thunder Bay towards the northernmost locations in the province. Bearskin Lake Air Service also offers two daily flights between Kenora and Thunder Bay with Beech 99 equipment. To the southeast, Voyageur Airways offers a daily service linking Manitouwadge and Marathon with Sudbury.

The regional carriers are not limited to providing local service within the region and they compete, to some extent, for traffic destined for the region's gateways. Access to the West is gained through Winnipeg with Bearskin Lake's service from Kenora and Air Ontario's two flights from Thunder Bay. Air Ontario and Voyageur Airways provide additional service from Toronto to North Bay and Sudbury. Austin Airways' two daily non-stop flights link Toronto with its base in Timmins. Through its recent acquisition of Torontair, Austin Airways expanded its Toronto operations by adding Elliot Lake as a destination. Pem Air provides the sole scheduled air service to Pembroke with three daily flights from Toronto. Finally, access to the East is gained with Voyageur Airways' daily Ottawa-North Bay flight.

(iii) Québec

Regional services in Quebec can be conveniently divided into two distinct sub-regions. The first sub-region consists of those communities located along Lac St. Jean and the St. Lawrence River. Access to those communities is gained through Montréal and Québec. Montréal acts as the principal gateway to the second sub-region which consists of those communities in northwestern Québec.

Historically, much of the service to both sub-regions were provided by Air Canada, Nordair and Quebecair although smaller carriers have provided local services. However, Table 2.4 suggests that there has been significant changes in both sub-regions of the province. The average number of seats per departure declined by 14% from 56 seats in 1985 to 49 seats in 1986. This downward trend in aircraft size, which has occurred elsewhere in the country, is largely due to the introduction of new services by the smaller non-jet carriers. Major carrier service has not substantially changed since 1985. While Table 2.4 suggests that the major carriers' share of seat-kilometres has declined from 97% in 1985 to 87% in 1986, the emerging regional carriers, such as Propair and Nordair Metro, are closely affiliated with Quebecair and Nordair.

Quebecair continues to provide much of the service to the northeastern part of the province. Service from Québec to Baie Comeau, Mont-Joli and Sept-Îles are performed largely with Boeing 737 jet equipment. A twice daily service, linking Iles-de-la-Madeleine and Gaspé to Mont-Joli is conducted with 40 seat HS-748 aircraft. Quebecair flies the Bagotville-Montréal route twice a day with a mix of Boeing 737 jet and Convair 580 turboprop equipment. Bagotville serves as the regional airport to the Chicoutimi-Jonquière region. Air Canada is the only other carrier providing jet service with its daily Montréal-Québec-Sept-Îles flight.

Nordair Metro, which is partly owned by Nordair, began competing with Quebecair when it introduced three daily turboprop flights between Montréal and Bagotville early in 1986. Nordair itself no longer provides service to the region since it vacated the Chibougamau-Dolbeau-Montréal route late in 1985. Propair, which offers its services on behalf of Quebecair, restored the Chibougamau-Montréal portion with a daily flight in 1986. Propair, which had long offered a daily Bonaventure-Mont-Joli service for Quebecair, further extended its operations when it acquired routes that were formerly served by Quebec Aviation. The transferred operations included the Bagotville-Québec route which is served twice a day with 15 seat Beech 99 aircraft. Two other carriers, les Ailes de Charlevoix and Aviation Quebec Labrador, provide local services on behalf of Quebecair. The former carrier flies between La Malbaie and Québec three times a week while the latter airline offers two weekly frequencies between Bagotville and Sept-Îles.

Air Satellite uses small Cessna aircraft to perform its ferry service across the St. Lawrence river from Baie Comeau to Matane, Mont-Joli and Rimouski. The carrier also links its Baie Comeau base to Sept-Îles with two daily flights. Air Alma also uses Cessna equipment on its two daily flights departing Montréal to the communities of Roberval and Alma.

Most of the traffic for the northwestern part of the province is destined to its two largest cities: Rouyn and Val d'Or. Air Canada continues to provide its twice daily jet service on a Montréal-Rouyn-Val d'Or-Montréal circuit. Quebecair offers a similar service once a day with its Boeing 737 jet equipment. However, Québec instead of Montréal had been the base of the circuit until the spring of 1986. Nordair serves only Val d'Or from Montréal. One of its two daily Boeing 737 flights continues northwards to La Grande and Kuujuarapik.

Table 2.4

SCHEDULED CARRIER ACTIVITY¹
QUÉBEC

Regional Summary	1985	1986	% Change
Carriers	9	11	18.2%
Airports Served	18	21	14.3%
City pairs Served	25	27	7.4%
Departures per Week	414	526	21.3%
Seats per week	22990	25583	10.1%
Seat-km. per Week (x1,000)	7991	8532	6.3%
Average Seats per Departure	55.5	48.6	-14.2%
Average Stage Length (km.)	270.3	264.1	-2.3%

Carrier Shares	Departures		Seats		Seat-km.	
	1985	1986	1985	1986	1985	1986
Quebecair	41.30%	34.41%	57.43%	57.12%	57.51%	55.17%
Air Canada	12.32%	9.32%	22.63%	19.54%	24.67%	21.83%
Nordair	11.35%	4.37%	13.28%	7.99%	14.40%	10.12%
Nordair Metro ²	-	6.08%	-	6.00%	-	6.86%
Propair ³	3.38%	12.55%	0.91%	3.85%	0.56%	3.17%
Air Alma	-	9.13%	-	1.13%	-	0.68%
First Air	2.17%	1.71%	0.90%	0.81%	0.71%	0.67%
Air Satellite	20.77%	18.25%	2.24%	2.25%	0.62%	0.64%
Air Creebec	2.90%	2.28%	1.04%	0.94%	0.57%	0.54%
Aviation Québec Labrador ³	0.97%	0.76%	0.26%	0.23%	0.30%	0.28%
Les Ailes de Charlevoix ³	-	1.14%	-	0.14%	-	0.05%
Québec Aviation	4.83%	-	1.30%	-	0.65%	-

Notes: 1. Scheduled carrier data are for the weeks of May 15-21, 1985 and 1986.

2. Nordair Metro operates under Nordair's designator code.

3. Propair, Aviation Québec Labrador and Les Ailes de Charlevoix operate under Quebecair's designator code.

Source: Official Airline Guide.

Ottawa acts as an alternative gateway to the region with First Air's three times a week service to Rouyn and Val d'Or. First Air has recently transferred this route to Voyageur Airways. Propair has also offered a daily Montréal-Amos-Rouyn service. It has recently discontinued service on the route in favor of reinstituting non-stop services from Québec to Val d'Or and Rouyn. Air Creebec provides daily services between Val d'Or and Matagami as part of its James Bay operations.

(iv) Other Domestic and International Services

As is to be expected, the major centres of Central Canada, namely Toronto, Montréal and Ottawa, also serve as hubs for air transport services to points outside of Ontario and Québec. Figure 2.3 compares the number of seats offered during the week of May 15-21, 1986 in the inter-regional markets with the amount offered within Central Canada. Figure 2.3 also describes the distribution of capacity between the region's major centres. Figure 2.4 provides a similar description but it describes the distribution of traffic between carriers. It should be noted that such inter-regional and international services will only be mentioned briefly here.

The transcontinental market accounts for 64% of the capacity offered to other regions in Canada. Air Canada continues to offer the greatest number of flights in the market although its share of capacity decreased from 68% in 1985 to 65% in 1986. Most of the carrier's capacity is concentrated in Toronto but Air Canada also offers a variety of flights from Montréal and Ottawa. Air Canada also provides the sole transcontinental service out of Windsor with a daily flight to Winnipeg. CPAL is Air Canada's principal competitor in the market and has expanded its share of capacity from 27% in 1985 to 31% in 1986. CPAL has achieved this through the addition of frequencies with Boeing 737 equipment. All of CPAL's transcontinental services with the exception of a daily Montréal-Ottawa-Vancouver service are offered from Toronto. Pacific Western is the other competitor with a 4% capacity share. The carrier offers two daily flights between Toronto and Winnipeg in addition to its daily Toronto-Thunder Bay-Brandon-Calgary service.

CPAL's expansion of air services to the Atlantic Provinces was one of the most notable events of the past year. The carrier integrated Eastern Provincial's operations into its own and increased capacity by 31% at Montréal and 22% at Toronto. That and a new Ottawa-Halifax service contributed to the expansion of CPAL's share of capacity from 27% in 1985 to 34% in 1986. The rest of the capacity is provided by Air Canada which is now offering the same level of service as it did in 1985. Roughly half of the capacity is offered from Toronto, 40% from Montréal and the remainder from Ottawa.

Several communities in Central Canada act as gateways to Canada's North. Nordair provides the most extensive jet service from its base in Montréal but also offers northern service from Ottawa, Québec, Toronto and Val d'Or. First Air recently introduced a three times a week jet service between Ottawa and Frobisher Bay. Regional carriers also provide local

FIGURE 2.3
CAPACITY BY CITY AND SECTOR

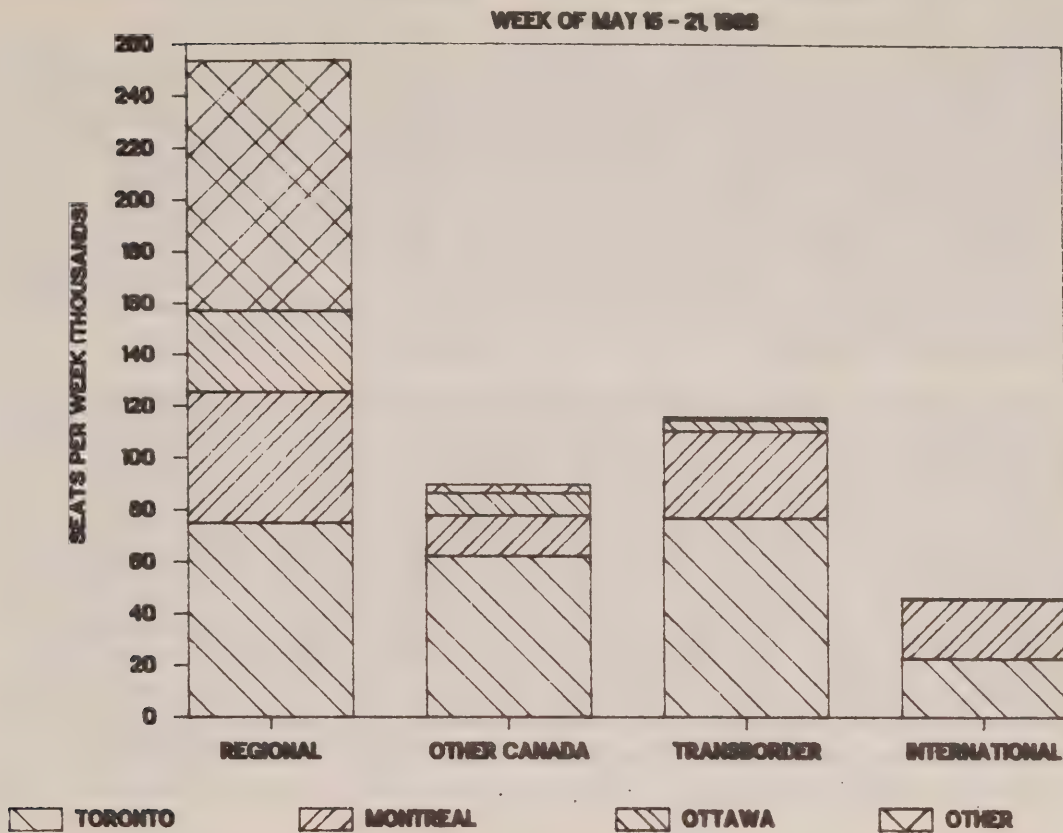
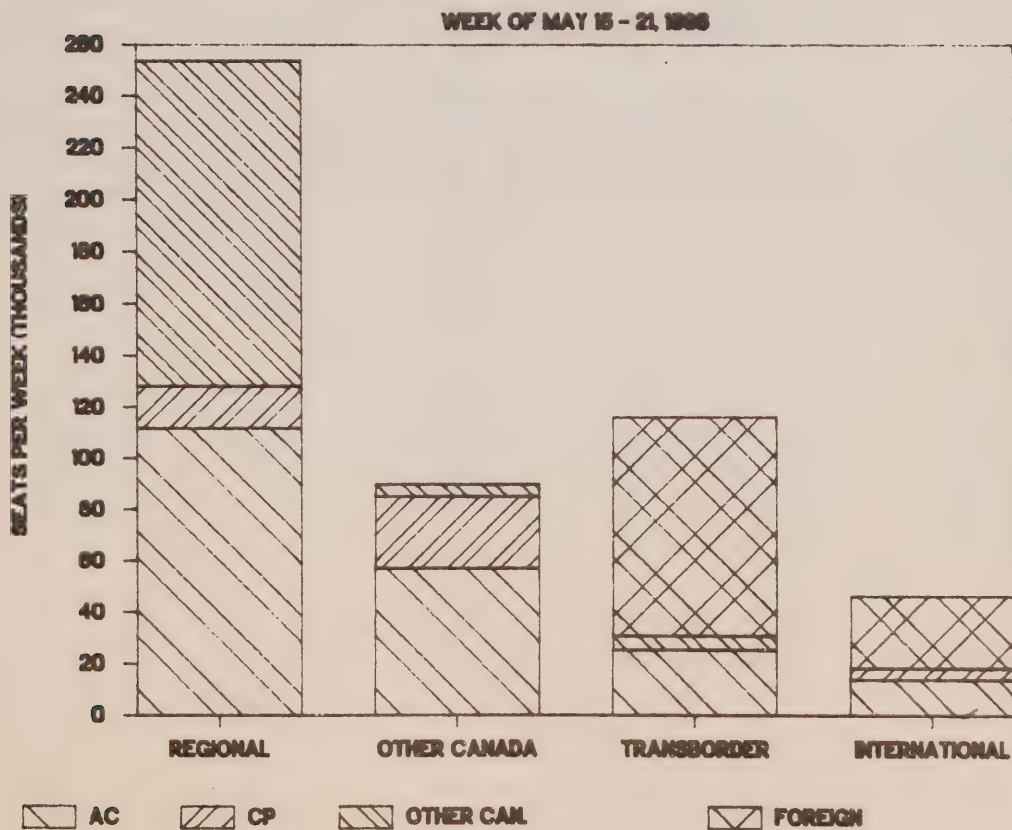


FIGURE 2.4
CAPACITY BY CARRIER AND SECTOR



service to the North. Air Inuit and Air Creebec are the major operators in northern Québec while Austin Airways, Bearskin Lake Air Service and norOntair serve the northernmost part of Ontario.

In terms of traffic volume, Toronto is the most important centre for transborder operations although significant levels of service are also offered from Montréal and Ottawa. Transborder service is provided by 12 carriers from Toronto, 13 from Montréal, and four carriers from Ottawa. In contrast to Canada's domestic markets, there has been relatively little change in transborder service patterns. However, new services were introduced by People Express and Presidential Airways at Montréal's Mirabel Airport. Kenora, London and Thunder Bay also receive transborder air service provided by regional carriers.

Toronto and Montréal (Mirabel) serve as Canada's principal gateways to over 30 countries. A total of 25 carriers, including Air Canada and CPAL, provide international service from Central Canada. Figure 2.3 somewhat distorts the distribution of capacity between Montréal and Toronto because the plot only includes non-stop capacity destined for foreign countries. Mirabel acts as a major point of entry to North America with roughly half of the flights continuing to Toronto. In contrast, most of the non-stop flights arriving at Toronto do not continue elsewhere. Most of the international activity is concentrated on the North Atlantic although extensive services are also offered to the Caribbean. Service to Asia, Australasia, and South America are more limited although they are becoming more important. Air Canada also operates a weekly service between Québec and Paris during the summer.

HISTORICAL MOVEMENT OF PRICES IN CENTRAL CANADA (ONTARIO & QUÉBEC)

Air fares observed in 14 selected city pairs over the past three years in the central region are presented in Table 2.5. These city pairs cover the major centres within the provinces of Ontario and Quebec, and some major points in eastern Canada which are connected by scheduled air services to Toronto, Montreal and Ottawa. Three fare types are reported for each city pair. They include two full fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definitions of these fare types can be found in Part C of the Air Transport Monitor, Volume 2, Number 1.

The changes in the fares from 1983 to 1986 are as follows:

The modal full fare and the lowest available full fare were identical in 13 out of the 14 city pairs examined in 1983 and in 11 of them in 1986. In 10 city pairs both types of full fares increased at an identical rate over this three-year period. The modal full fare rose in all city pairs, with the increase ranging from 15% to 20%. In 11 city pairs, the lowest full fare increased between 17% and 26%, whereas in three city pairs namely, Québec-Toronto, Ottawa-Toronto and Montréal-Toronto, it decreased by 13%, 15% and 44% respectively. The lowest full fare on the Montréal-Toronto and Québec-Toronto routes declined due to the introduction of a special economy fare by Quebecair in 1986 and the Ottawa-Toronto fare declined because of the introduction of a commuter carrier service in September 1984. On the Sudbury-Toronto route, the lowest full fare rose by 26% as Voyageur Airways Ltd., discontinued its low priced service to Toronto Island Airport in July 1984.

The situation regarding discounted fares is quite different. Discounted fares have declined in all but one city pair. The decrease ranged from 1% to 49%. In six city pairs the decline was more than 30%. On the Toronto-Windsor route, the discounted fare increased marginally by 2%.

As far as the central region is concerned, it would seem that the May 10, 1984 Policy has had an impact not so much on full fares but on discounted fares. In fact, air travellers in the central region have benefitted from lower discount fares over the past three years, the drop being substantial in a number of instances.

Table 2.5

AIR FARES FOR SELECTED CITY PAIRS IN THE CENTRAL REGION

(Ontario & Québec)

February 15, 1983 - 1986

(Fares in Current Canadian Dollars)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fares</u>		<u>Discounted Lowest Non- Status Return Fare</u>
		<u>Modal</u>	<u>Lowest</u>	
Montréal-Toronto				
1986	507	246	118	98
1985	507	240	214	99
1984	507	226	226	90
1983	507	212	212	117
Ottawa-Toronto				
1986	363	214	158	90
1985	363	210	138	89
1984	363	198	170	79
1983	363	186	186	93
Thunder Bay-Toronto				
1986	910	334	334	128
1985	910	320	320	160
1984	910	302	302	121
1983	910	284	284	155
Sault St. Marie-Toronto				
1986	494	246	246	98
1985	494	234	234	117
1984	494	222	222	89
1983	494	208	208	114
Québec-Toronto				
1986	731	298	218	118
1985	731	282	282	141
1984	731	268	268	107
1983	731	250	250	138
Montréal-Québec				
1986	235	188	188	78
1985	235	180	180	81
1984	235	170	170	68
1983	235	160	160	88

Table 2.5 (cont'd)

City Pair	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non- Status Return Fare
		Modal	Lowest	
Toronto-Windsor				
1986	313	208	208	98
1985	313	198	198	99
1984	313	186	168	74
1983	313	174	174	96
Sudbury-Toronto				
1986	340	212	212	98
1985	340	202	198	88
1984	340	190	168	76
1983	340	180	168	99
Montréal-Saguenay				
1986	381	238	238	119
1985	381	228	228	114
1984	381	216	216	162
1983	381	200	200	200
Toronto-Halifax				
1986	1 287	418	418	99
1985	1 287	398	398	176
1984	1 287	376	376	150
1983	1 287	352	352	194
Montréal-Halifax				
1986	803	314	314	99
1985	803	300	300	132
1984	803	282	282	113
1983	803	264	264	145
Toronto-St. John's				
1986	2 123	574	574	159
1985	2 123	548	438	242
1984	2 123	518	518	207
1983	2 123	484	484	266
Ottawa-Halifax				
1986	954	342	342	99
1985	954	328	328	180
1984	954	310	310	124
1983	954	292	292	161

Table 2.5 (cont'd)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fares</u>		<u>Discounted Lowest Non- Status Return Fare</u>
		<u>Modal</u>	<u>Lowest</u>	
Montréal-Edmonton				
1986	2 967	790	790	199
1985	2 967	752	752	249
1984	2 967	712	712	249
1983	2 967	666	666	366

Notes: These fares do not include tax.
Definitions of three fare types are found in Section C of the Air Transport Monitor, Volume 2, Number 1.

Sources: ATPCO Passenger Tariff, 29 January 1986
ATPCO Passenger Tariff, 13 February 1985
ATPCO Passenger Tariff, 15 February 1984
ATPCO Passenger Tariff, 16 February 1983

Official Airline Guide, 15 February 1986
Official Airline Guide, 01 February 1985
Official Airline Guide, 01 February 1984
Official Airline Guide, 01 February 1983

Air carrier tariffs filed with the Air Transport Committee.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

Table 2.6 provides information on Canadian and U.S. domestic fares in the respective currencies of the two countries for selected city pairs in each country. City pairs in Canada and in the U.S. were selected on the basis of their similarity in terms of distance and traffic volume characteristics. With respect to the Canadian city pairs, the table focuses on the central region (Ontario and Québec) and U.S. city pairs were also selected to the extent possible from a comparable geographic area, i.e., the eastern part of the country. Three fare types are reported for each city pair. They include two full adult fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definitions of these fare types can be found in Part C of the Air Transport Monitor, Volume 2, Number 1.

In three out of the four Canadian city pairs examined in this section, the modal full fare offered by the dominant carrier(s) (defined in terms of maximum non-stop flights per week) also represents the least expensive full fare which is available for travel in peak periods between these points. In the fourth Canadian city pair, namely Toronto-Montréal, the lowest full fare was 52% lower than the modal full fare. However, in all the U.S. city pairs, the lowest full fare available was substantially below the modal full fare, the discount ranging from 25% to 56%.

The absolute dollar value of the various fares offered in both Canadian and U.S. markets can be the basis of a fare comparison in the two countries. When fares are looked at in the respective currencies of the two countries, with the exception of the modal full fare in one city pair, they are found to be higher in Canada than on comparable routes in the U.S. However, in three of the four city pairs, discounted lowest non-status return fares offered in Canada represented a greater discount from the modal full fare than the ones offered in the U.S.

In the Canadian market, the discounts from a full fare ranged from a high of 71% in the case of Ottawa-Halifax to a low of 60% in the Toronto-Montréal market. With regard to the U.S. city pairs examined, the comparable discounts ranged from 69% in the case of Boston-Cleveland to a low of 51% in the New York-Norfolk market.

Table 2.6

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES
(Canadian fares in current Canadian dollars,
U.S. fares in current U.S. dollars)

February 15, 1986

<u>City Pair</u>	1984 Passenger Volume*	One-Way Distance (km)	Return		Discounted Lowest Non- Status Return Fare
			<u>Full</u>	<u>Fares</u>	
			<u>Modal</u>	<u>Lowest</u>	
Toronto-Montréal	1 085 327	507	246	118	98
New York-Norfolk	1 037 208	465	146	109	72
Thunder Bay-Toronto	172 050	910	334	334	128
Boston-Cleveland	179 609	906	415	183	128
Montréal-Halifax	117 590	803	314	314	99
Boston-Norfolk	106 590	753	239	165	91
Ottawa-Halifax	91 290	954	342	342	99
Boston-Raleigh/Durham	96 760	985	257	128	91

Notes: *Includes commuter traffic.
These fares do not include tax.
Definitions of the three fare types are found in Section C of the
Air Transport Monitor, Volume 2, Number 1.

Sources: ATPCO Passenger Tariff, January 29, 1986.
Official Airline Guide, February 15, 1986.
Air carrier tariffs filed with the Air Transport Committee.
Airline flight schedule of People Express.

SCHEDULED AIR SERVICES IN THE NORTH

The Canadian North covers a vast territory. A definition of northern Canada is provided in the Air Carrier Regulations. According to this definition, the Canadian North is the region lying above the 50th parallel between the Atlantic coast of Canada and the Ontario-Manitoba border; to the north of a diagonal line drawn from the intersection of the 50th parallel with the Ontario-Manitoba border to the intersection of the 53rd parallel with the border of Manitoba and Saskatchewan; to the north of a diagonal line drawn from the intersection of the 53rd parallel with the Manitoba-Saskatchewan border to the intersection of the 55th parallel with the Saskatchewan-Alberta border; and to the north of a line from the intersection of the 55th parallel and the Saskatchewan-Alberta border along the 55th parallel to the Pacific Coast of Canada. Small in number and widely dispersed, the population living in this region consists primarily of indigenous people grouped into small communities. Air services play an essential role for these people. Before describing the scheduled air services in the North and remote areas, it is useful to outline the features which characterize this vast region. These characteristics affect air transport, because they define the needs of the region as well as the manner in which these needs can be satisfied.

In addition to the vastness of the region, the Canadian North is also characterized by climatic conditions, a topography and a demographic structure which make it impossible for other modes of transport than air to play the role in this region which they do in other parts of the country. It is in part for these reasons that one finds only a single carrier operating between the majority of settlements which have air services. This structure of air transport activities is also due to the high operating costs associated with such activities in this region. The high level of operating costs is in turn based on a number of factors. In the first instance, because of the remoteness of the communities and the weak demographic base, carriers have to offer isolation bonuses in order to attract labour. Furthermore, the fuel used by planes in the North must be delivered to the various communities and the high cost of such an operation is reflected in the price paid for this factor of production in the North. On the other hand, the weak demand for air services influences the equipment used which, in turn dictates the manner in which the different communities are served. Furthermore, this equipment is not only operated under more severe conditions than those prevailing in the South but also in the absence of the more sophisticated air infrastructure. All these factors result in high operating costs.

The principal economic activity in this region consists of the exploitation of natural resources which is supplemented by hunting and fishing. In connection with the exploitation of petroleum and mineral resources, air transport plays an important role with respect to the resupply of the communities. Freight traffic accounts for a significant proportion of the operating revenues of the air carriers in this region and consequently this activity assumes a special importance in the overall profitability of air services. On the other hand, in their resupply role, carriers are faced with a uni-directional south to north demand for their services. Finally, it is important to note that, air transport, in addition to supporting economic

activities in the region, also plays a major role with respect to health care and postal service.

This section provides a description of commercial scheduled air services in remote regions and in the North during the first quarter of 1986. Although non-scheduled carriers, charter and private air transport activities, are not insignificant in remote and northern regions, these activities will not be examined here. The week of February 15-21, 1986 forms the reference time period for the analysis. A comparison is also made with services offered in the course of the same week in 1985 in order to identify recent changes in the available services. Figures 2.5 and 2.6 provide a graphic representation of scheduled air services operated in remote regions and in the North during the week of February 15-21 in 1985 and 1986 respectively. Before proceeding to a discussion of the services shown in these figures, the following cautionary points must be made. First of all, the figures do not provide any indication either with regard to the frequency of the service between points or the number of carriers providing a connection between them. Thus, a connection provided once a week is shown in the same way as a service operated once a day. Similarly, a connection provided by a single carrier is depicted in the same way as a connection served by more than one carrier. Furthermore, all services between two points, except non-stop ones, may require a plane change or even a change in carriers, and this also is not shown in these figures. On the other hand, the direction of the services is shown; the absence of an arrow on a connection represents a service which is operated in both directions.

In the first quarter of 1986, 25 carriers provided scheduled air services in the northern regions of Canada. Table 2.7 provides a listing of the active carriers in 1985 and 1986, identifies the type of equipment operated by each of them and provides the estimated seating capacity for each type of aircraft. Among the carriers which provided scheduled services in 1986 were five Level I operators, six Level II, eleven Level III and three Level IV carriers. Compared to the same period in 1985, no new carriers arrived on the scene but two carriers have left. On a global basis, scheduled air activity in remote regions and the North expanded between the first quarter of 1985 and the first quarter of 1986 in that the number of departures and the number of available seats increased by 27.2% and 17.5% respectively. This growth is partly attributable to the decision on the part of Austin Airways Limited and Calm Air to operate on a scheduled basis air services with propeller equipment which they had previously only provided on demand.

In order to describe in more detail scheduled air services in remote regions and in the North, these major regions have been divided into five sub-regions (see Figure 2.7): region 1 includes roughly Québec, the Maritimes and the eastern part of the District of Franklin; region 2 takes in Ontario; region 3 covers Manitoba, Saskatchewan and most of the District of Keewatin; region 4 encompasses essentially Alberta, the Mackenzie District, and the western part of the District of Franklin; and region 5 consists of British Columbia and the Yukon. Figure 2.8 shows recent changes in the scheduled air activity in each of these regions. While the major expansion of air activities in regions 2 and 3 is due to the extension of scheduled air services by Austin Airways in Ontario and Calm Air in Manitoba, the decline

Figure 2.5

**SCHEDULED AIR SERVICES IN CANADIAN
NORTHERN AND REMOTE AREAS**

For week of February 15-21, 1985

The map illustrates the extensive network of scheduled air services across Canada, with a focus on northern and remote regions. Solid lines represent routes primarily within the north, while dashed lines indicate routes connecting northern areas to southern Canada. Major hubs are shown in larger boxes, including Yellowknife, Edmonton, Winnipeg, and Montreal. The map covers a wide range of geographical areas, from the Arctic north to the southern provinces and territories. Numerous airports are labeled, including Inuvik, Tuktoyaktuk, Repulse Bay, and many others. The legend in the bottom right corner clarifies the line types used to represent different types of air services.

Legend

- Northern routes
- - - Dividing line for Northern and Southern Canada

SCHEDULED AIR SERVICES IN CANADIAN NORTHERN AND REMOTE AREAS

For week of February 15-21, 1985

Figure 2.6

SCHEDULED AIR SERVICES IN CANADIAN NORTHERN AND REMOTE AREAS For week of February 15-21, 1986

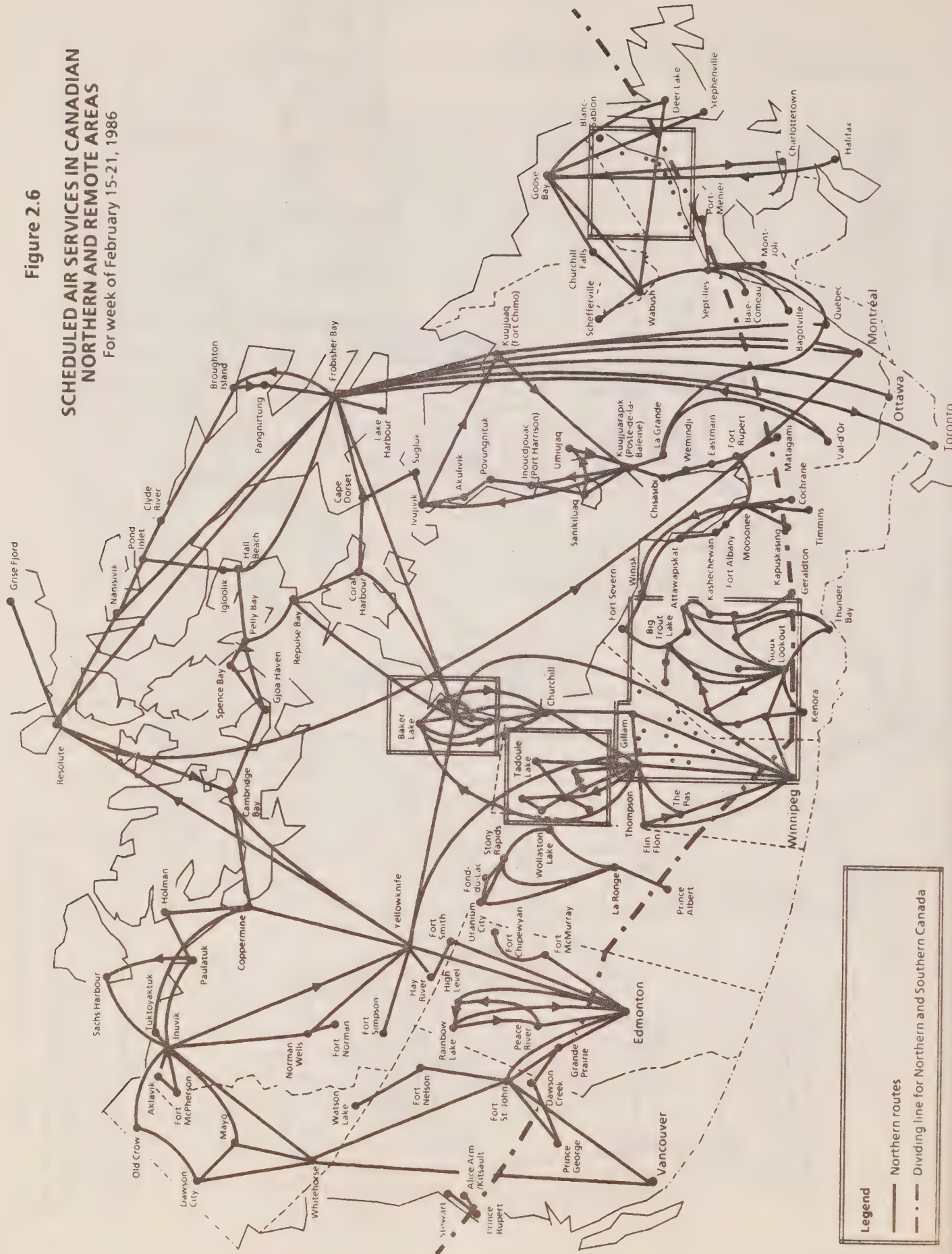


Figure 2.5 (cont'd)

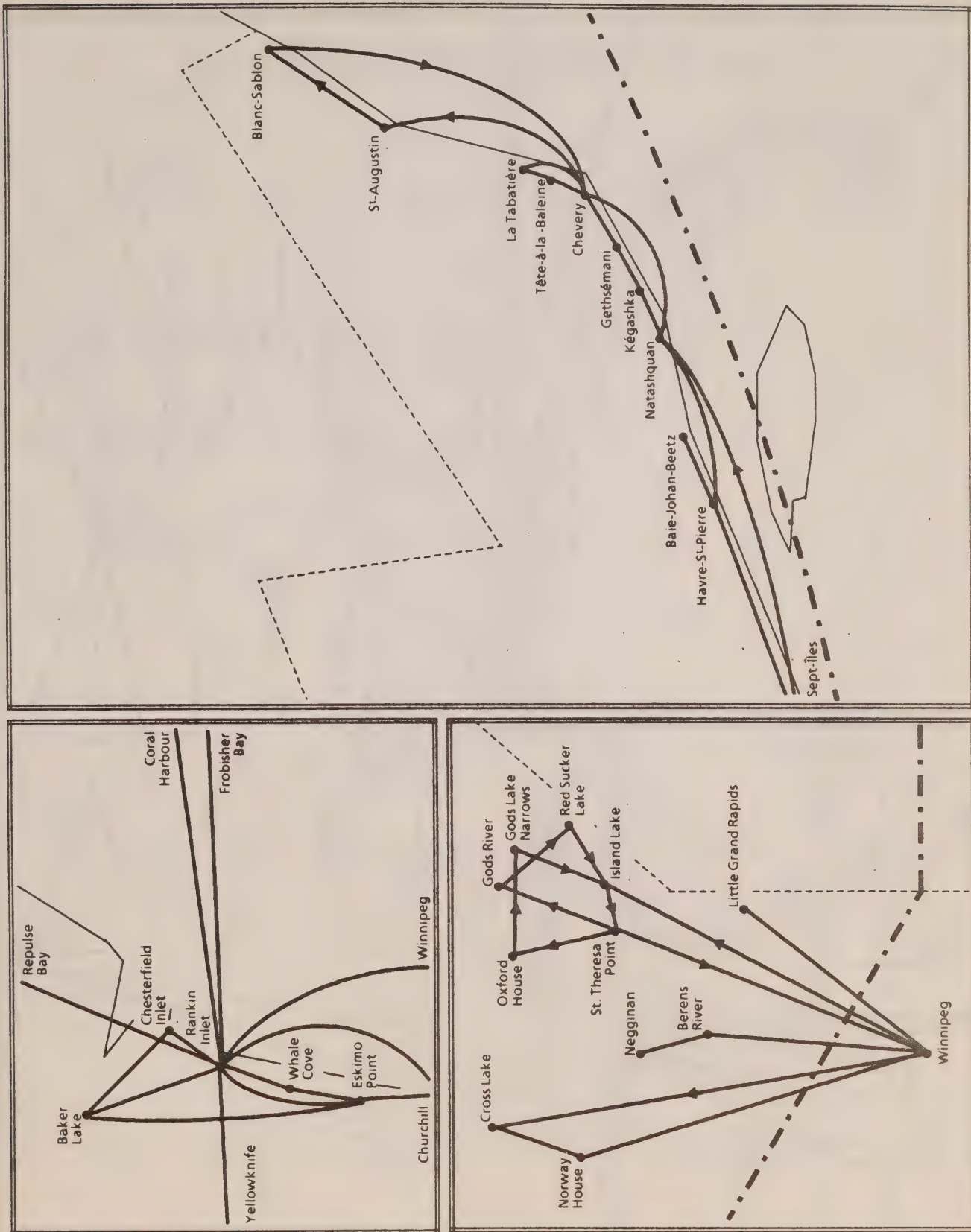


Figure 2.6 (cont'd)

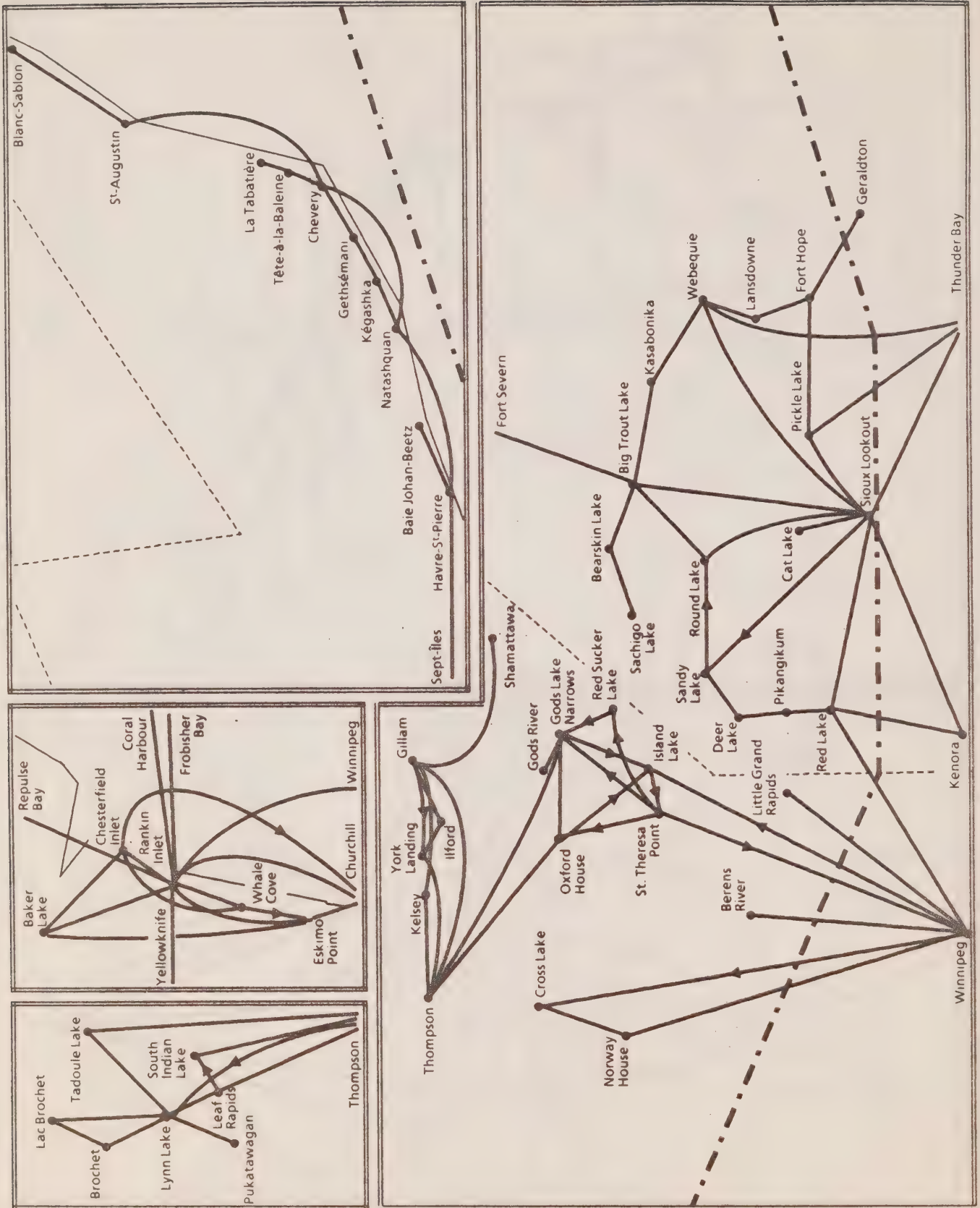


Table 2.7

FLEET OF CANADIAN CARRIERS OPERATING
SCHEDULED SERVICES IN REMOTE REGIONS AND THE NORTH
1985 AND 1986

<u>Canadian Carrier</u>	<u>Aircraft Type</u>	<u>Used 1985</u>	<u>In 1986</u>	<u>Estimated Seating Capacity</u>
<u>LEVEL I</u>				
Air Canada	McDonnell Douglas DC-9 -30	X	X	102
Canadian Pacific Air Lines	Boeing 737 (all series)	X	X	109
	Boeing 737-200 Mixed Passenger/Freight	X	X	56
Eastern Provincial Airways Ltd.	Boeing 737 (all series)	X		119
	Boeing 737-200 Mixed Passenger/Freight	X		56
Nordair Inc.	Boeing 737-200 Mixed Passenger/Freight	X	X	56
Pacific Western Airlines Ltd.	Boeing 737-200 Mixed Passenger/Freight	X	X	56
	Boeing 737-200	X	X	119
Quebecair	Bac-111 (all series)	X		79
	Boeing-737 (all series)	X	X	109
	Hawker Siddeley 748 (all series)	X	X	40
<u>LEVEL II</u>				
Austin Airways Limited	DeHavilland DHC-6 Twin Otter	X	X	20
	Hawker Siddeley 748 (all series)	X	X	40
	Cessna (all series)	X	X	6
	Beechcraft C99		X	15
First Air	DeHavilland DHC-6 Twin Otter	X	X	20
	Hawker Siddeley 748 (all series)	X	X	40
	Boeing 727-100 Mixed Passengers/Freight		X	56
Norcanair	Fokker-Fairchild F27 (all series)	X	X	42

Table 2.7 (cont'd.)

Canadian Carrier	Aircraft Type	Used In		Estimated Seating Capacity
		1985	1986	
Northwest Territorial Airways Ltd.	Lockheed Electra L-188 Mixed Passenger/Freight	X	X	49
	Douglas DC-3 Mixed Passenger/Freight	X	X	14
Time Air Ltd.	Convair (all series)	X	X	48
	DeHavilland DHC-7	X	X	50
Trans-Provincial Airlines Ltd.	Grumman Goose	X	X	10
<u>LEVEL III</u>				
Air Creebec Inc.	DeHavilland DHC-6 Twin Otter	X	X	20
	Hawker Siddeley 748	X	X	40
Air Inuit Ltée-Ltd.	DeHavilland DHC-6 Twin Otter	X	X	20
	Hawker Siddeley 748 (all series)	X	X	40
Air Satellite Inc.	Cessna (all series)	X	X	6
Bearskin Lake Air Service Ltd.	Beechcraft C99	X	X	15
	Piper Navajo	X	X	6
Calm Air International Ltd.	DeHavilland DHC-6 Twin Otter	X	X	20
	Hawker Siddeley 748 (all series)	X	X	40
Kenn Borek Air Ltd.	Beechcraft (all series)	X	X	15
	DeHavilland DHC-6 Twin Otter		X	20
Nahanni Air Services Ltd.*	Britten-Norman Islander			10
	DeHavilland Twin Otter (series 100)			20
	Piper Aztec			6
	Cessna 402			6
norOntair	DeHavilland DHC-6 Twin Otter	X	X	20
North Cariboo Flying Service Ltd.	Piper Navajo	X		6
	Beechcraft C99	X		15

Table 2.7 (cont'd.)

Canadian Carrier	Aircraft Type	Used In		Estimated Seating Capacity
		1985	1986	
Perimeter Airlines (Inland) Ltd.	Beechcraft (all series)	X	X	15
	McDonnell Douglas DC-3	X	X	26
Propair Inc.	DeHavilland of Canada Otter	X	X	10
	DeHavilland of Canada Beaver	X	X	10
Trans North Air	Embraer Bandeirante	X	X	19
	Cessna	X	X	6
<u>LEVEL IV</u>				
Air Schefferville Inc.	Beechcraft C99	X		15
	DeHavilland DHC-6 Twin Otter	X	X	20
Aviation Québec Labrador Ltée	Beechcraft C99	X		15
	Beechcraft (all series)		X	15
Dawn Air**	DeHavilland DHC-6 Twin Otter			20
	DeHavilland DHC-3 Otter			10
	DeHavilland DHC-2 Beaver			6
	Cessna 185			4

* In remote regions and the North, air carriers modify the configuration of their equipment according to their needs. Consequently, the actual number of available seats can vary considerably from the calculated average.

** Any one of the listed aircraft types could have been flown in 1985 and in 1986.

in services in region 5 is largely attributable to the cessation of scheduled flights by North Cariboo Flying Service Ltd. in north-eastern British Columbia.

Region 1 - Québec, Maritimes and the Eastern Part of the District of Franklin

In New Québec, two carriers provide scheduled air services: Air Creebec Inc. serves the James Bay coast and Air Inuit Ltée - Ltd., the Hudson Bay coast and Kuujjuaq. Established in 1982 to meet the transport needs of the Cree communities, Air Creebec, of which 51% is owned by the Regional Cree Council and 49% by Austin Airways Limited, provides a daily two-way service between Val d'Or, Matagami, Fort Rupert, Eastmain, Wedminji and Fort George. The carrier uses a 40-seater Hawker Siddeley 748 or a 20-seater Dash Twin Otter. In addition, Air Creebec flies the long trip to Kuujjuarapik in the "Grand Nord" of Québec three times a week. Air Creebec has also recently introduced a weekly service between Fort Rupert and Moosonee. Since 1983, Air Inuit has been providing a scheduled service to the Inuit population living along the coasts of Hudson Bay and Ungava Bay. The present operations of Air Inuit extend from Kuujjuarapik to Cape Dorset in the south-west of Baffin Island and to Kuujjuaq on the shore of Ungava Bay. Recently, Air Inuit introduced a bi-weekly service between Kuujjuarapik, La Grande and Québec City. Air Inuit uses Dash Twin Otters, except for its long distance courier services which are provided by a Hawker Siddeley 748.

Scheduled air services to the north shore of the St. Lawrence are provided by Quebecair and its affiliates. From Monday to Friday, Quebecair provides daily service between Sept-Iles, Havre St-Pierre, Natashquan, Chevery, St-Augustin and Blanc-Sablon with a 40 - seater Hawker Siddeley 748. Sept-Iles forms the transfer point between Quebecair's services to southern Québec and those to the North Shore. Under a service contract with Quebecair, Propair Inc., looks after the local transport needs by operating a regular service to Havre-St-Pierre, Baie Johan-Beetz, Natashquan, Kégashka, Gethsémani, Chevery, Tête-à-la-Baleine and La Tabatière by means of propeller equipment with a capacity of 10 seats. Likewise, Aviation Quebec Labrador links, on behalf of Quebecair, Port-Menier to Sept-Iles on one hand, and Bagotville to Sept-Iles on the other, by Beechcraft equipment. During the week, Air Schefferville Inc. provides a scheduled service between Wabush and Schefferville which ties in well with Quebecair's service between Toronto, Montréal, Québec, Sept-Iles and Wabush.

In January 1986, Eastern Provincial Airways Ltd. (EPA) ceased to exist in that its new parent company, Canadian Pacific Air Lines, integrated all of EPA's services into its own operations. Since then, scheduled air connections between Labrador and the Maritimes have been provided by the second most important carrier in Canada and some of these services are now also directly linked with Central Canada.

Frobisher Bay, the administrative headquarters for the eastern Arctic, is also the hub for scheduled air services in the far north area. In the first quarter of 1986, 27 flights per week originated in Frobisher Bay for other northern settlements or for major centres in southern Canada, namely Montréal, Ottawa and Toronto. Nordair Inc. provides a daily connection, except Sundays, between Montréal and Frobisher Bay with its mixed

Figure 2.7

SUBDIVISIONS OF NORTHERN AND REMOTE AREAS

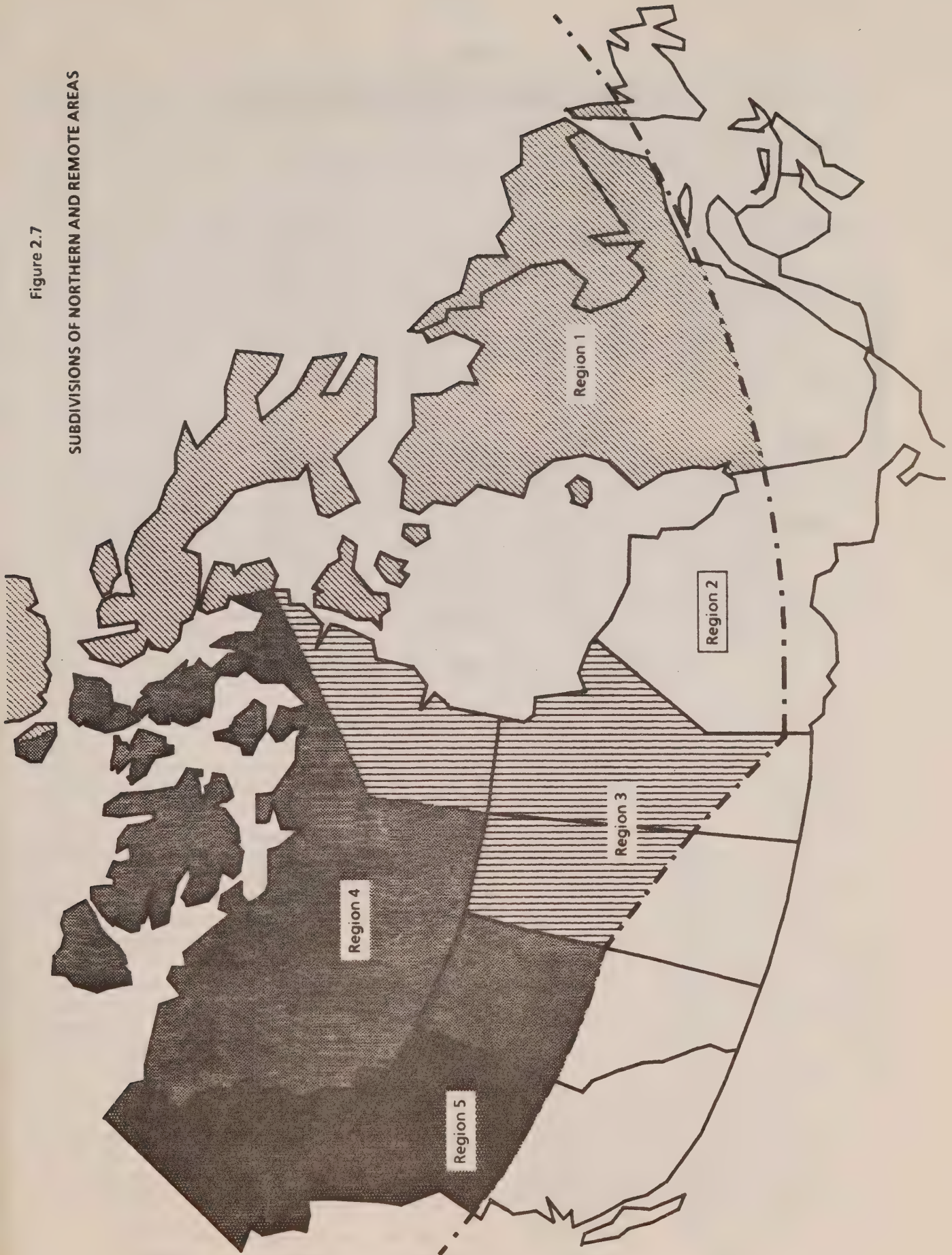
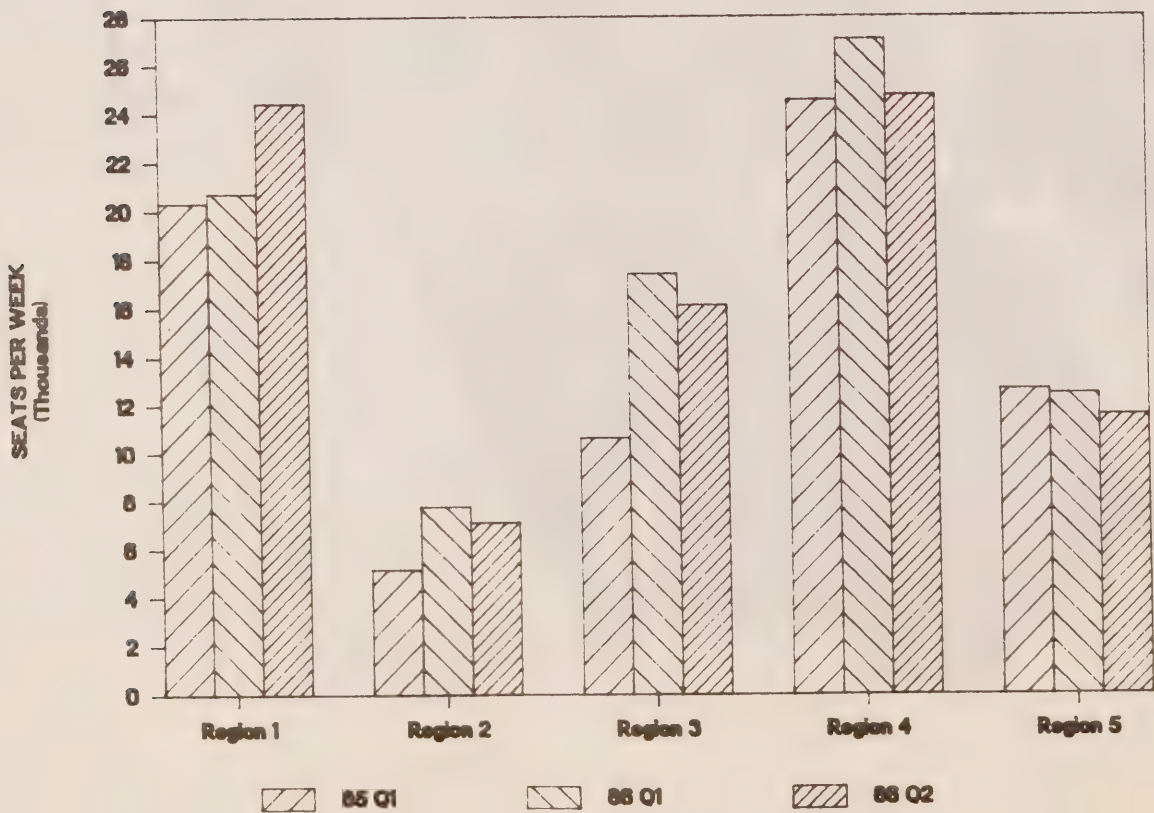
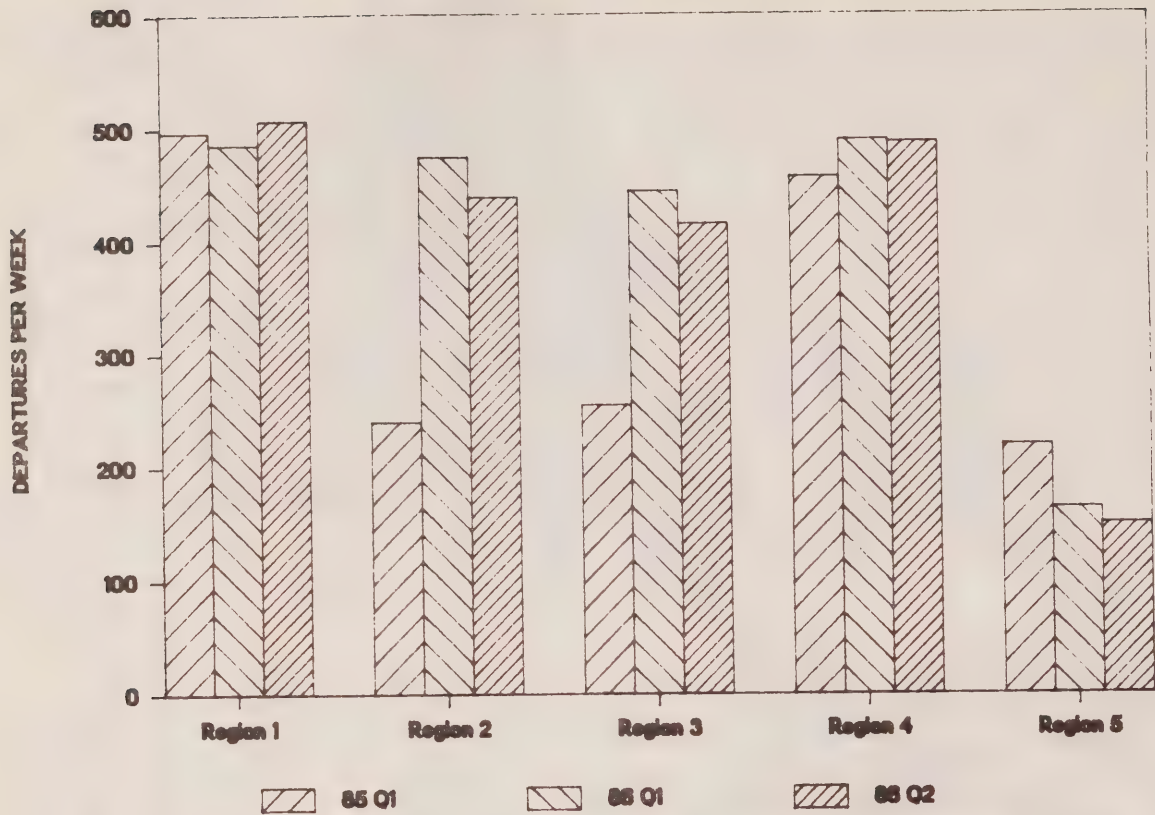


FIGURE 2.8
NORTHERN REGIONAL MARKETS



configuration Boeing 737. Recently, First Air established a twice-weekly link between Frobisher Bay and Ottawa. This new service, which supplements Nordair's weekly connection, is provided by a Boeing 727. Moreover, Frobisher Bay is also linked by non-stop service to nine communities in the Canadian North, namely Kuujjuaq, Lake Harbour, Nanisivik, Cape Dorset, Broughton Island, Pangnirtung, Hall Beach, Rankin Inlet and Resolute. While Nordair provides the links between Frobisher Bay and Kuujjuaq, Nanisivik, Hall Beach and Resolute, First Air serves the eastern coast of Baffin Island and links this region with the Northwest Territories. As well, First Air provides a connection between Frobisher Bay and Nuuk in Greenland once a week. Finally, Kenn Borek Air Ltd. of Calgary recently established a weekly service between Resolute, Nanisivik and Pond Inlet as well as between Resolute and Grise Fjord. Previously, this Alberta based carrier served those settlements to the north of Baffin Island only on demand.

Region 2 - Ontario

In northern Ontario where the majority of communities are only accessible by air, scheduled air services have been established in the form of local networks. These services are provided by three carriers: Austin Airways Limited, Bearskin Lake Air Service Ltd. and norOntair. Austin Airways, one of the longest-established carriers in Canada, operates over most of Ontario. Nevertheless, in the first quarter of 1985, it was providing scheduled air services only in the northeastern part of the province, namely from Timmins to Fort Severn and in the northcentral part, from Geraldton to Webequie. Between 1985 and 1986, Austin Airways added to its scheduled services the points of Red Lake, Pikangikum, Deer Lake, Sandy Lake, Round Lake, Big Trout Lake, Bearskin Lake and Sachigo Lake, all of which are located in the northwestern part of the province. In addition, it also linked the North-Central part of the province to the northwest and northeast by instituting a scheduled service between Thunder Bay, Webequie, Kasabonika, Big Trout Lake and Fort Severn. However, all these points which were integrated into Austin Airways scheduled services had been previously served on a demand basis. Bearskin Lake Air Service Ltd., whose designated base is at Sioux Lookout, looks after the local traffic in the northwestern part of the province. Thus it serves the points of Sioux Lookout, Sandy Lake, Round Lake, Big Trout Lake and Fort Severn in the North and Thunder Bay, Kenora and Winnipeg in the South. norOntair, which was set up by the Ontario government in 1971, provides service to the communities of Pickle Lake and Red Lake. These two points are accessible from the south starting from Thunder Bay. While the service from Thunder Bay to Pickle Lake is non-stop, that from Thunder Bay to Red Lake is interrupted by stops at Atikokan, Fort Frances, Dryden and Kenora. As well, the community of Red Lake is linked to the south by non-stop daily service to Kenora. There were no major changes in the networks operated by Bearskin Lake Air Service and norOntair between the first quarter in 1985 and the same period in 1986.

An examination of scheduled air services in northern Ontario shows that Thunder Bay is the principal gateway to the northwestern and northcentral parts of the province while Timmins is the entry point for the north-eastern region of the province. While three carriers, Austin Airways, Bearskin Lake Air Service and norOntair operate scheduled services to the North from Thunder Bay, Timmins is only served by Austin Airways. There are

three main centres in the far north of Ontario: Sioux Lookout and Big Trout Lake in the northwestern sector and Moosonee in the northeast. Between the first quarter of 1985 and the first quarter of 1986, there have been some significant changes in the level of scheduled air services to each of these points.

In the first quarter of 1986, Sioux Lookout enjoyed an increase in air service because Austin Airways joined Bearskin Lake Air Service in providing scheduled services to this community. Bearskin Lake Air Service serves Sioux Lookout by Beechcraft C99 (15 seats) and the services operated by Austin Airways utilize Cessnas (six seats) and 20-seater DeHavilland DHC-6 Twin Otters. The number of weekly departures from Sioux Lookout to various communities in northern Ontario increased from 34 flights a week in the first quarter of 1985 to 57 flights in the first quarter of 1986. This increase is attributable to the fact that Austin Airways established a regular service, using Cessnas, between Sioux Lookout and each of the following points: Cat Lake, Pickle Lake, Red Lake, Webequie and Round Lake. The five flights a week operated by Austin Airways between Sioux Lookout and Round Lake supplement the daily service (except Sundays) flown by Bearskin Lake Air Service between these points.

The second important settlement in northern Ontario is Big Trout Lake. Located 442 km to the northeast of Sioux Lookout, this community is only accessible by the air mode. While in the first quarter of 1985, scheduled air services to this settlement were only operated by Bearskin Lake Air Service, in the first quarter of 1986 Austin Airways integrated Big Trout Lake into its regular timetable. As was the case with Sioux Lookout, the introduction of regular flights by Austin Airways to Big Trout Lake resulted in a growth in scheduled air activity in this community. Thus, the 15 weekly departures from Big Trout Lake which were offered by Bearskin Lake Air Service were supplemented by 12 flights a week operated by Austin Airways. In particular, Austin Airways provides a non-stop service between Big Trout Lake and Fort Severn, Bearskin Lake, Kasabonika and Round Lake while Bearskin Lake Air Service links Fort Severn and Sioux Lookout to Big Trout Lake by non-stop service. It is interesting to note that both Austin Airways and Bearskin Lake Air Service provide scheduled service between Big Trout Lake and Fort Severn. The two carriers operate this service three times per week (Monday, Wednesday and Friday) using equipment with a capacity of six passengers. Finally, Bearskin Lake Air Service abandoned the daily service between Big Trout Lake and Kasabonika in 1986. However, this service was picked up by Austin Airways, which flies the route Monday to Friday with a Cessna.

The third important centre is Moosonee. Situated on the Moose River some 25km from James Bay, this community is the end of the rail line operated by the Ontario Northland Railway. As the principal settlement in northeastern Ontario, Moosonee provides access to all communities along James Bay and Hudson Bay. Moosonee is linked by non-stop flights to Fort Albany, Winisk and Attawapiskat. In addition, Moosonee is directly linked with the cities of Timmins, Cochrane and Kapuskasing to the south. Austin Airways is the only carrier providing connections between Moosonee and the other settlements in the northeastern region of the province. In the first quarter of 1985, there were 26 departures a week from Moosonee, while in the first

quarter of 1986 they had increased to 36 per week. This increase is largely the result of additional flights between Moosonee and Cochrane and between Moosonee and Kapuskasing.

Region 3 - Manitoba, Saskatchewan and the District of Keewatin

Air transport serving northern Manitoba originates mainly in Winnipeg, in the south of the province. Three carriers provide scheduled air services to the northern regions of Manitoba: Perimeter Airlines (Inland) Ltd., Pacific Western Airlines Ltd., and Calm Air International Ltd. Air services near the Manitoba - Ontario border are provided by Perimeter Airlines, whose designated base is Winnipeg. The fleet of Perimeter Airlines consists of McDonnell Douglas DC-30 (26 seats) and 15-seater Beechcraft. Perimeter Airlines operates scheduled air services from Winnipeg to the following points: Norway House, Cross Lake, Berens River, Little Grand Rapids, Island Lake, St. Theresa Point, Oxford House, Red Seecker Lake, Gods Lake Narrows and Gods River. In general, the services operated in this region have not undergone major changes. Nevertheless, Perimeter Airlines did abandon the direct connection between Neginan and Berens River and has modified somewhat the itinerary of the services which link the settlements Oxford House, St. Theresa Point, Island Lake, Red Sucker Lake, Gods Lake Narrows and Gods River. A final point which should be noted is the introduction of scheduled services by Calm Air between the following points, Oxford House - Gods Lake Narrows, St. Theresa Point - Gods Lake Narrows, Gods Lake Narrows - Island Lake and Island Lake - St. Theresa Point; these communities were previously already served on a regular basis by Perimeter Airlines. The second airline providing scheduled services in northern Manitoba is Pacific Western Airlines Ltd. PWA serves the points of Flin Flon, Thompson, Churchill, The Pas and Gillam by Boeing 737 with a capacity of approximately 119 seats. The services to all these points depart from Winnipeg. During the period under discussion, PWA did not make any major changes in the services which it operated to points in northern Manitoba. The third carrier which operates scheduled services in northern Manitoba is Calm Air International Ltd. In the first quarter of 1985, it provided a direct link between Thompson and Churchill. Since then, it has integrated into its network of scheduled services all the points north of Thompson (i.e. Pukatawagan, Leaf Rapids, South Indian Lake, Lynn Lake, Tadoule Lake, Brochet, Lac Brochet, Kelsey, York Landing and Ilford) and has established a direct link between Thompson and Gillam, and Gillam and Shamattawa. All these points were previously served according to traffic requirements. At the same time, Calm Air also extended its regular services to some settlements south of Thompson (settlements already served by Perimeter Airlines), specifically Oxford House, Gods Lake Narrows, St. Theresa Point and Island Lake. All these services are operated by DeHavilland Twin Otters and Hawker Siddeley 748's which have a seating capacity of 20 and 40 seats respectively. Thompson has become one of the the major centres of air activity in northern Manitoba. Between the first quarter of 1985 and the first quarter of 1986, the number of flights departing Thompson for various destinations in Manitoba increased from 11 to 51 flights per week. In contrast, Churchill remains the principal gateway to the District of Keewatin and Calm Air provides a direct link between it and the Inuit communities of Eskimo Point, Rankin Inlet and Baker Lake.

Scheduled services to, from and within the District of Keewatin are provided by Calm Air and Northwest Territorial Airways Ltd. These services have undergone relatively few changes. The only significant changes are the addition by Calm Air of direct links between Chesterfield Inlet and Whale Cove, between Chesterfield Inlet and Churchill (one way only) and between Thompson and Baker Lake (one way only). Northwest Territorial Airways (NTA) links Rankin Inlet, the administrative centre of Keewatin, to Yellowknife (Mackenzie District) and Frobisher Bay (District of Franklin), twice a week by a mixed cargo/passenger configuration Lockheed Electra with a capacity of 49 seats. As well, NTA provides a regular service between Yellowknife, Winnipeg and Rankin Inlet. The frequency of flights between Winnipeg and Yellowknife has been reduced from six to three flights per week and the frequency between Winnipeg and Rankin Inlet remains at two flights a week.

Norcanair, which was established by the Saskatchewan government more than 40 years ago and which was privatized in 1965, is one of the two carriers operating scheduled air services in northern Saskatchewan. Norcanair serves the points of La Ronge, Stony Rapids, Uranium City and Wollaston Lake with 42-seater Fokker - Fairchild F27s. Flights to destinations in northern Saskatchewan originate in Regina and then proceed to Saskatoon and Prince Albert. Nevertheless, Prince Albert, by virtue of its direct link with La Ronge, is the focal point which links the north and the south of the province. La Ronge and Stony Rapids are the main centres of air activity in northern Saskatchewan. In the first quarter of 1986, Norcanair operated daily flights on weekdays between Prince Albert, La Ronge and Stony Rapids with an interim stop at Wollaston Lake on Mondays and at Uranium City on Tuesdays. The addition of a direct connection from La Ronge to Stony Lake and a stop at either Uranium City or Wollaston Lake on the way back to La Ronge and Prince Albert, has permitted all these communities to receive service in both directions. The second carrier in northern Saskatchewan is Dawn Air, with a designated base at Uranium City. It serves the communities of Fond-du-Lac and Stony Rapids on Tuesdays, Thursdays and Saturdays.

Region 4 - Alberta, Mackenzie District and the Western Part of the District of Franklin

In Alberta, the network of air services to the north of the 55th parallel has developed on a north-south axis, converging on Edmonton. Time Air Ltd., which is partly owned by PWA, dominates the scheduled air services in this region with its 48-seater Convairs. Although it holds an operating permit for scheduled services to Fort McMurray, Fort Chipewyan, Peace River and High Level, PWA only serves the Fort McMurray - Edmonton market on a regular basis since the local market in northern Alberta is not lucrative enough to justify the use of large planes. Nevertheless, PWA provides a scheduled service, by Boeing 737, between southern Alberta and the districts of Mackenzie and Franklin in the Northwest Territories. Thus PWA provides a daily service during weekdays between Edmonton, Fort Smith, Hay River and Yellowknife. On the other hand, PWA links Edmonton with Inuvik twice a day with stops at Yellowknife and Norman Wells. Finally, twice a week, PWA connects Edmonton and Resolute with a stop at Yellowknife.

The requirements for scheduled services by local traffic in the Mackenzie District are met by Northwest Territorial Airways Ltd., Kenn Borek

Air Ltd., and Nahanni Air Services Ltd. Northwest Territorial Airways, (NTA) with its base in Yellowknife, is the principal Canadian carrier operating air services in the North. With its mixed configuration propeller aircraft, NTA joins Yellowknife to Inuit communities located along the Northwest Passage, namely Holman, Coppermine, Cambridge Bay, Gjoa Haven, Spence Bay and Pelly Bay. Over and above some minor changes to the itineraries with respect to these settlements, NTA recently suspended its service between Pelly Bay and Hall Beach. This service was picked up by First Air. Elsewhere, NTA no longer operates scheduled flights between Yellowknife and Fort Simpson in the southwestern part of the Mackenzie District. In fact, NTA has recently dropped scheduled service between Fort Simpson, Wrigley and Norman Wells as well as between Fort Simpson and Fort Nelson, B.C. In addition to services within the Mackenzie District, NTA connects Yellowknife with the District of Keewatin and Baffin Island as well as providing a link between Yellowknife and southern Canada. Thus NTA carries out two flights a week between Yellowknife, Rankin Inlet and Frobisher Bay and operates three flights a week between Yellowknife and Winnipeg. Even though NTA services between Yellowknife and Winnipeg had consisted of six flights per week in the first quarter of 1985, the present connections between Yellowknife and southern Canada are not less numerous since NTA recently introduced two daily flights between Yellowknife and Edmonton. On the other hand, Kenn Borek Air Ltd., the Alberta-based carrier, provides scheduled air services in the Mackenzie Delta region. Thus Kenn Borek provides regular connections between Inuvik and the surrounding communities by Beechcraft equipment. Recently, this carrier extended its service to the settlements of Paulatuk and Holman. Finally, a small local carrier based at Norman Wells, Nahanni Air Services Ltd., links Norman Wells to Fort Norman three times a week.

Region 5 - British Columbia and Yukon

The last region to be examined consists of British Columbia and Yukon Territory. Since the last issue of the Air Transport Monitor presented a detailed analysis of scheduled services in British Columbia, only services linking centres in the province directly with the Yukon will be discussed here. Readers who are interested in services provided in northern British Columbia can find a description of these in the previous issue of the Monitor. With respect to local air services in British Columbia, it should be noted that North Cariboo Flying Service Ltd., holder of a permit valid for one year, has stopped providing a scheduled service to the points of Fort Nelson, Fort St. John, Dawson Creek, Prince George, Tumbler Ridge and Chetwynd.

Access to the Yukon from British Columbia is possible from Vancouver, Fort St. John and Fort Nelson. Prince George lost its status as a gateway to the North when PWA abandoned its service between Prince George and Whitehorse. In fact, by dropping the Prince George - Whitehorse link, PWA relinquished completely its scheduled service to the Yukon. Actually, Canadian Pacific Air Lines is the only carrier providing scheduled services between B.C. and the Yukon and its services are operated by Boeing 737 equipment with a capacity of 109 seats. Thus, CPAL provides a daily service (except Saturdays) between Vancouver and Whitehorse via Fort St. John. On Saturdays, CPAL follows the same route but stops at Prince George and then Fort St. John before continuing on to Whitehorse. The Vancouver-Whitehorse

city pair is also joined by a commuter service on Mondays and Fridays. Finally, CPAL operates three flights a week between Fort Nelson and Watson Lake.

In 1976, Trans North Air began scheduled services in the Yukon Territory by picking up the routes abandoned by Northward Airlines when it went bankrupt. Trans North Air is the only carrier to offer scheduled services in this region. It operates Embraer Bandeirantes and Cessnas with a capacity of 19 and 6 seats respectively. The principal centre for air activity in the Yukon is Whitehorse, the capital of the Territory. Recently, Trans North Air dropped some routes which had enabled it to link the Yukon with some settlements in the Mackenzie District. Thus, Trans North Air abandoned its Whitehorse - Watson Lake - Yellowknife route as well as service between Whitehorse and Norman Wells. Nevertheless, it maintained its service to Inuvik with only minor modifications. Finally, it is important to note that Trans North Air has, in the past, also operated a scheduled service to Juneau, Alaska using Embraer Bandeirantes. This service, however, was dropped at the end of 1985.

HISTORICAL MOVEMENT OF PRICES IN THE NORTH

Air fares observed in 30 selected city pairs over the past three years in the northern region (see the previous section for the definition of this region) are presented in Table 2.8. These city pairs cover the major centres within the northern region as well as some major points in the southern region which are connected to the North by scheduled air services. In the North very few city pairs are served by more than one air carrier. In 1986, except for Yellowknife-Cambridge Bay, Edmonton-Yellowknife, Sioux Lookout-Big Trout Lake and Québec-Sept-Îles, each of remaining city pairs is served by one air carrier. Therefore, the modal and the lowest full fares are identical in most of the city pairs examined. Consequently, only two fare types are reported for each city pair--return full fare and discounted lowest-priced non-status return fare (for definitions see Section C of the Air Transport Monitor, Volume 2, Number 1). Any airline which offers a service between these 30 city pairs has been selected.

Airlines serving the northern region are very seldom confronted with a competitive market-place. Such a monopolistic position in the various markets explains why the spread between the discount fares and the full fares in the North is smaller than is the case in the southern region. During the three-year period, only one of the 30 city pairs chosen for the fare analysis, Yellowknife-Cambridge Bay, has had modal and lowest full fares. The full fare shown for this market is that charged by Northwest Territorial Airways, the dominant carrier. The second airline on this route, PWA, offers a full fare which is approximately 25% lower than the one of the dominant carrier.

Changes in the fares offered in the northern region from 1983 to 1986 can be summarized as follows:

- In all the city pairs the full fare increased between 3% and 23%. Increases greater than 15% were observed in 16 city pairs. In 17 city pairs the discounted fares increased between 1% and 24%; in two city pairs they remained the same; and in 11 city pairs they decreased between 1% and 44%. In four of the 11 city pairs, in which the discount fares fell, discounted fares were not available in 1983.

It is important to remember that the May 10, 1984 Policy maintained regulation for the northern region. The full fares offered have increased over the three-year period as have the majority of discounted fares. This differs from the situation in the southern region, which as a result of the said Policy was partially deregulated and where one can observe, despite increases in the return full fares, substantial decreases in discounted fares.

Table 2.8

AIR FARES FOR SELECTED CITY PAIRS IN THE NORTHERN REGION
(Fares in current Canadian dollars)

15 February, 1983 - 1986

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fare</u>	<u>Discounted Lowest Non-Status Return Fare</u>
Whitehorse-Dawson City			
1986	426	410	308
1985	426	370	185
1984	426	352	176
1983	426	334	251
Whitehorse-Inuvik			
1986	847	658	495
1985	847	592	296
1984	847	564	282
1983	847	536	402
Yellowknife-Inuvik			
1986	1 088	434	239
1985	1 088	414	228
1984	1 088	392	255
1983	1 088	368	239
Yellowknife-Rankin Inlet			
1986	1 135	816	530
1985	1 135	816	530
1984	1 135	784	510
1983	1 135	736	478
Yellowknife-Cambridge Bay			
1986	849	448	194
1985	849	448	187
1984	849	448	209
1983	849	420	196
Rankin Inlet-Baker Lake			
1986	256	354	265
1985	256	---	---
1984	256	---	---
1983	256	296	296
Rankin Inlet-Frobisher Bay			
1986	1 176	888	577
1985	1 176	888	577
1984	1 176	854	555
1983	1 176	802	520

Table 2.8. (cont'd)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fare</u>	<u>Discounted Lowest Non-Status Return Fare</u>
Frobisher Bay-Resolute Bay			
1986	1 575	744	409
1985	1 575	710	355
1984	1 575	672	504
1983	1 575	616	462
Frobisher Bay-Broughton			
1986	470	374	187
1985	470	364	236
1984	470	350	227
1983	470	336	218
Edmonton-Inuvik			
1986	1 965	718	359
1985	1 965	686	377
1984	1 965	648	421
1983	1 965	606	333
Edmonton-Yellowknife			
1986	1 019	402	221
1985	1 019	392	216
1984	1 019	372	242
1983	1 019	348	226
Winnipeg-Rankin Inlet			
1986	1 467	860	559
1985	1 467	860	559
1984	1 467	826	537
1983	1 467	776	505
Winnipeg-Yellowknife			
1986	1 743	642	417
1985	1 743	642	417
1984	2 059	618	402
1983	2 059	580	377
Montréal-Frobisher Bay			
1986	2 059	882	595
1985	2 059	840	420
1984	2 059	794	479
1983	2 059	728	498

Table 2.8 (cont'd)

City Pair	One-Way Distance (km)	Return Full Fare	Discounted Lowest Non-Status Return Fare
Montréal-Kuujjuaq			
1986	1 451	718	485
1985	1 451	686	343
1984	1 451	648	383
1983	1 451	594	392
Churchill-Rankin Inlet			
1986	466	498	373
1985	466	---	---
1984	466	---	---
1983	466	418	418
Kuujjuarapik-Ivugivik			
1986	793	770	770
1985	793	704	704
1984	793	672	672
1983	793	672	672
Kuujjuarapik-Kuujjuaq			
1986	650	536	536
1985	650	490	490
1984	650	N/A	N/A
1983	650	522	522
Thompson-Churchill			
1986	398	138	103
1985	398	---	---
1984	398	---	---
1983	398	122	122
Sioux Lookout-Big Trout Lake			
1986	434	230	164
1985	434	220	166
1984	434	212	160
1983	434	200	180
Wabush-Goose Bay			
1986	431	254	140
1985	431	242	107
1984	431	228	91
1983	431	216	119

Table 2.8 (cont'd)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fare</u>	<u>Discounted Lowest Non-Status Return Fare</u>
Wabush-Sept-Îles			
1986	303	248	124
1985	303	236	118
1984	303	224	168
1983	303	208	208
La Ronge-Stony Rapids			
1986	457	306	199
1985	457	306	199
1984	457	292	190
1983	457	292	190
Prince Albert-La Ronge			
1986	217	128	83
1985	217	128	83
1984	217	122	80
1983	217	122	80
Winnipeg-Thompson			
1986	656	298	164
1985	656	282	155
1984	656	268	174
1983	656	250	163
Timmins-Moosonee			
1986	307	188	140
1985	307	182	136
1984	307	182	136
1983	307	174	130
Québec-Sept-Îles			
1986	536	258	118
1985	536	246	104
1984	536	232	128
1983	536	214	118
Halifax-Goose Bay			
1986	964	378	99
1985	964	360	159
1984	964	340	136
1983	964	322	177

Table 2.8 (cont'd)

<u>City Pair</u>	<u>One-Way Distance (km)</u>	<u>Return Full Fare</u>	<u>Discounted Lowest Non-Status Return Fare</u>
Deer Lake-Goose Bay			
1986	503	268	147
1985	503	256	113
1984	503	242	97
1983	503	228	125
Thunder Bay-Sioux Lookout			
1986	270	206	104
1985	270	198	100
1984	270	190	160
1983	270	180	160

Notes: --- Not shown due to problems in verification.

These fares do not include tax.

Sources: ATPCO Passenger Tariff, 29 January 1986
 ATPCO Passenger Tariff, 13 February 1985
 ATPCO Passenger Tariff, 15 February 1984
 ATPCO Passenger Tariff, 16 February 1983

Official Airline Guide, 15 February 1986
 Official Airline Guide, 01 February 1985
 Official Airline Guide, 01 February 1984
 Official Airline Guide, 01 February 1983

Air carrier tariffs filed with the Air Transport Committee.

Part III

SPECIAL FEATURES

This part of the report provides a forum to report on the results of work carried out within the Research Branch as well as on topics which may be of particular interest to the consideration of competition and regulation in the Canadian air transport industry.

The paper in this issue of the Air Transport Monitor presents a discussion of the changes which have taken place in the domestic air passenger transport industry since May 1984 by analyzing the industry's structure, conduct and performance.

Canadian Air Transport Industry: Recent Trends

by

Roger Roy¹

1. INTRODUCTION

On May 10, 1984, a new Domestic Air Policy was unveiled. Some associated this new policy with deregulation, others saw in it a regulatory reform allowing a staged liberalization of regulation. The gradual elimination of pricing controls and the allowed free and open competition proposed in the policy, created public expectations. New trends emerging from the relaxation of airline economic regulation are distinguishable and this paper identifies them in relation to the expectations created by the new policy. The most telling expectations have to do with the anticipation of an increase in the level of competition. Increased competition promises to impact on costs (and, by the same token, on fares), on services and on efficiency. It is important to examine the recent trends in relation to expected changes. To do so, a standard economic approach consisting of analyzing the industry's structure, conduct and performance, is used to review the domestic air passenger transport industry.

2. STRUCTURE AND PERFORMANCE

By allowing free and open competition between the so-called National, Regional and Local carriers, and by permitting new or existing carriers to apply to the Canadian Transport Commission (CTC) to serve any domestic route with any equipment it wants, the new policy promised a more competitive market structure. But the word "market", in the context of air services, can mean, at one extreme, the entire industry or, at the other, an individual city pair. The first point to emphasize is that the actual number of airlines in the industry is not the best indicator of market structure competitiveness.

Level I airlines² dominate the industry in terms of number of passengers carried and of revenue passenger-kilometres³ (RPK's)(Table 3.1). Level I carriers' market share (percentage of the industry's output) has decreased slightly from 1981 to 1984. In 1981, Level I airlines were responsible for 93.8% of the total number of passengers carried (27,188,609) compared to 91.7% in 1984 (from a total of 27,700,754). It is important to note that in 1984 the passenger traffic level was back to its pre-recession level. Level I airline passenger traffic in 1984 was still below its 1981 level while both Level II and Level III airlines were observing, over the same years, a net increase in their actual number of passengers carried. Traffic gains of smaller carriers appear to have resulted from losses by the Level I carriers. However, because of the recession, the evidence is far from being conclusive. When looking at the RPK figures for unit toll operations, the market share gain achieved by smaller airlines are negligible.

Table 3.1

INDICATORS OF UNIT TOLL
ACTIVITIES BY CARRIERS' LEVEL

Passengers (thousands)

	1984	1983	1982	1981
Level I Carriers	21 604 (92%)	18 105 (92%)	19 189 (93%)	22 004 (94%)
Level II	1 180 (5%)	897 (5%)	874 (4%)	986 (4%)
Level III	654 (3%)	558 (3%)	592 (3%)	448 (2%)
Level IV	123 (1%)	99 (1%)	78 (*)	27 (*)
TOTAL	23 561	19 659	20 733	23 465

Passenger kilometre (million) - Unit Toll Services

	1984	1983	1982	1981
Level I Carriers	34 105 (98%)	31 288 (99%)	32 095 (99%)	35 350 (99%)
Level II	320 (1%)	255 (1%)	252 (1%)	240 (1%)
Level III	201 (1%)	154 (*)	170 (*)	148 (*)
Level IV	16 (*)	12 (*)	10 (*)	29 (*)
TOTAL	34 642	31 709	32 527	35 767

Hours Flown

	1984	1983	1982	1981
Level I Carriers	526 742 (71%)	502 459 (73%)	530 342 (73%)	564 286 (77%)
Level II	70 773 (10%)	66 651 (10%)	67 297 (9%)	83 083 (11%)
Level III	120 005 (16%)	102 597 (15%)	112 856 (16%)	81 143 (11%)
Level IV	22 682 (3%)	19 976 (3%)	17 211 (2%)	6 544 (1%)
TOTAL	740 202	691 593	727 706	735 056

Departures

	1984	1983	1982	1981
Level I Carriers	340 315 (52%)	323 511 (55%)	339 438 (56%)	372 161 (60%)
Level II	99 110 (15%)	86 794 (15%)	95 147 (16%)	134 234 (22%)
Level III	166 000 (26%)	139 578 (24%)	138 494 (23%)	106 844 (17%)
Level IV	45 181 (7%)	40 038 (7%)	28 984 (5%)	10 823 (2%)
TOTAL	650 606	589 921	602 063	624 062

Two sources of explanation for the recent traffic trend can be found and have to be presented in the context of the new competitive pressures prevailing in the industry. One has to do with the changing structure of the industry while the other stands on the activities occurring at the market level. The latter is addressed in the next section.

° Changes of Control and Amalgamations

Between January 1, 1984 and September 30, 1985, the Air Transport Committee issued 21 decisions concerning changes of control and amalgamations of airlines.⁴ Concerning changes of control of air carriers, Eastern Provincial Airways Ltd. (EPA), Quebecair, Pacific Western Airlines Ltd. (PWA) and Nordair were Level I carriers who had their control modified. For Level II carriers, only Time Air and Norcanair experienced a change of control although a somewhat similar development has since involved Air Ontario. The acquisition of EPA by Canadian Pacific Air Lines (CPAL) could have been perceived as an indication that the airline industry was heading towards a period of consolidation in which stronger carriers would try to absorb weaker lines. In fact, EPA's acquisition has meant, for the travelling public, a coast to coast competitive service. CPAL's move to acquire Nordair should also give the carrier a stronger presence in Quebec and Ontario, complementing already existing routes in both western Canada and throughout Atlantic Canada. (A large block of Nordair's shares has been bought by CPAL. It is noted that Quebecair also had a substantial investment interest in Nordair, before being itself acquired by Nordair Metro.) Prior to the publicly announced intention of CPAL to acquire Nordair, a change in Nordair's control from Air Canada to Innocan Ltd. was allowed by the Air Transport Committee (ATC) on November 28, 1984. Earlier that year, PWA had acquired a minority interest in Time Air while in November of 1984 PWA's change of control from the Government of the Province of Alberta to the general public was approved.

° Commercial Agreements

An efficient competitive tool in a deregulated environment which impacts indirectly on the structure of the industry has to do with commercial agreements between airlines. Alliances of large airlines with small commuter carriers complement the network with traffic flows from smaller communities. In some cases, the alliance model follows an equity investment in the partner carrier. If PWA's interest in Time Air is an example of such an arrangement, it is not the only one. PWA and Air Canada have each acquired a 24.5% share of Air Ontario, despite criticisms of such a move on the part of Air Canada. As a result of this move, Air Canada dropped some short haul markets in Ontario. In other cases, a pure commercial arrangement is behind two carriers' collaboration. A commercial agreement allows, among other things, passengers to transfer with ease from one carrier's operation to another for connecting flights. Such an agreement exists between CPAL and AirBC as well as with Pem-Air. As a result, CPAL and AirBC are competing with PWA and its local service partner, Time Air in British Columbia. The trend of local carriers linking up with larger carriers is not new to Canada. As a matter of fact, Air Ontario has been operating under a commercial agreement with Air Canada for the past ten years, Air Ontario reservations being handled by Air Canada and the local carrier being a member of the national airline's

frequent flyer program. The agreement also allows the offering of combined fares.

If commercial agreements are not new to the airline industry, the new challenge facing airlines forces them to look more and more at such agreements as a way to maintain or expand their position in the marketplace. This tendency can be illustrated by recent cases. A new carrier in Quebec called Nordair Metro, jointly formed by Nordair and Toronto Airways (Torontair) is to provide a feeder service to CPAL in Quebec and to compete with Quebec Aviation; in this case, many of the cities to which it intends to fly are already served by the other local carrier. Nordair Metro's creation is interesting because it illustrates the new emphasis prevailing in the industry toward cooperation between scheduled jet and turboprop services. In Atlantic Canada, as a result of the demise of Air Maritime, a subsidiary of the now defunct EPA, Air Atlantic, backed by CPAL, and Air Nova, a potential Air Canada protégé, are to succeed Air Maritime. Air Atlantic has an agreement with CPAL to act as the large carrier's commuter airline in Atlantic Canada, using its reservation system and its passenger check-in facilities. The 10 year agreement with CPAL allows Air Atlantic to operate Air Maritime's routes once the airline is set to fly. Air Atlantic flights will connect with CPAL jet flights in major Maritime locations as part of a hub and spoke schedule. Air Nova is trying to strike a similar deal with Air Canada to have a streamlined feeder system to larger destinations. These two new commuter airlines will fly Dash-8 turboprop aircraft.

Early in 1986, Nordair announced that it had reached a commercial agreement with CPAL. Since then, the two airlines have honoured each other's tickets and shared some fares. Joint fares are a less expensive method of purchasing tickets than if each airline sells them separately. Because of EPA's acquisition by CPAL, Nordair is able to offer many connecting flights from the east coast to Sudbury. Nordair is also part of CPAL's travel bonus plan.

Although the evidence presently available is not as extensive as could be desired, a preliminary appraisal of the economic implications of agreements between air carriers indicates that they have so far allowed

- 1) replacement of the big carriers' cumbersome and infrequent jet service in short haul low density markets by turboprop feeder service, providing an improved service for the customer with the resulting increase in frequency (Table 3.2);
- 2) benefits for local carriers resulting from the access to a major carrier's interline marketing, advertising and reservation facilities;
- 3) and, finally, with the assistance in passenger handling from major carriers, an offset to the financial handicap suffered by short haul operators.

The fact that Level I airlines account for more than 90 per cent of the industry's output is misleading, because it overstates the monopoly power prevailing in the industry. The number of firms which dominate the industry has decreased but the rivalry between the carriers has intensified. A number of important markets are served by competing airlines. Through mergers and commercial agreements, large carriers are confronted with an environment

Table 3.2.a

UNIT TOLL ACTIVITIES IN THE SOUTHERN DOMESTIC SECTOR

		Jet		Non-Jet		Total	
		Departures	Seats (000)	Departures	Seats (000)	Departures	Seats (000)
1Q	1978	4 278 (64%)	520.1 (89%)	2 423 (36%)	62.1 (11%)	6 701	582.2
2Q	1978	4 256 (63%)	521.5 (89%)	2 539 (37%)	64.3 (11%)	6 795	585.8
3Q	1978	4 556 (64%)	570.1 (90%)	2 615 (36%)	61.6 (10%)	7 171	631.7
4Q	1978	4 604 (66%)	554.3 (90%)	2 406 (34%)	59.7 (10%)	7 010	614.0
3Q	1983	4 528 (66%)	567.4 (90%)	2 348 (34%)	63.5 (10%)	6 876	630.9
3Q	1984	4 534 (62%)	580.5 (88%)	2 785 (38%)	82.6 (12%)	7 319	663.1
4Q	1984	4 428 (60%)	559.2 (86%)	2 984 (40%)	89.3 (14%)	7 412	648.5
1Q	1985	4 615 (59%)	582.1 (86%)	3 225 (43%)	91.0 (14%)	7 840	673.1
2Q	1985	4 764 (57%)	594.1 (86%)	3 659 (43%)	99.9 (14%)	8 423	694.0
3Q	1985	4 999 (56%)	633.0 (85%)	3 950 (44%)	113.1 (15%)	8 949	746.1
4Q	1985	4 746 (55%)	578.3 (84%)	3 939 (45%)	109.3 (16%)	8 685	687.6
1Q	1986	4 808 (51%)	585.1 (83%)	4 609 (49%)	120.5 (17%)	9 417	705.6
2Q	1986	4 881 (48%)	589.3 (81%)	5 189 (52%)	139.7 (19%)	10 070	729.0

N.B.: First Quarter : week of February 15-21
 Second Quarter : week of May 15-21
 Third Quarter : week of August 15-21
 Fourth Quarter : week of November 15-21

Source: Air Transport Monitor, Research Branch, Canadian Transport Commission.

Table 3.2.b

UNIT TOLL ACTIVITIES IN THE NORTHERN DOMESTIC SECTOR

		Jet		Non-Jet		Total	
		Departures	Seats (000)	Departures	Seats (000)	Departures	Seats (000)
1Q	1978	678 (50%)	66.6 (79%)	683 (50%)	17.8 (21%)	1 361	84.4
2Q	1978	729 (48%)	70.8 (78%)	789 (52%)	20.0 (22%)	1 518	90.8
3Q	1978	782 (49%)	76.1 (79%)	823 (51%)	20.4 (21%)	1 605	96.5
4Q	1978	738 (48%)	72.4 (77%)	814 (52%)	21.3 (23%)	1 552	93.7
3Q	1983	586 (39%)	58.6 (72%)	917 (61%)	22.4 (28%)	1 503	81.0
3Q	1984	555 (36%)	56.9 (70%)	972 (64%)	24.2 (30%)	1 527	81.1
4Q	1984	438 (30%)	42.8 (62%)	1 020 (70%)	26.4 (38%)	1 458	69.2
1Q	1985	463 (29%)	45.2 (62%)	1 145 (71%)	27.4 (38%)	1 608	72.6
2Q	1985	481 (30%)	47.2 (63%)	1 128 (70%)	27.6 (37%)	1 609	74.8
3Q	1985	522 (31%)	54.2 (65%)	1 175 (69%)	28.8 (35%)	1 697	83.0
4Q	1985	468 (26%)	46.3 (60%)	1 305 (74%)	30.4 (40%)	1 773	76.7
1Q	1986	471 (23%)	47.0 (55%)	1 574 (77%)	38.3 (45%)	2 045	85.3
2Q	1986	471 (24%)	44.0 (55%)	1 513 (76%)	36.3 (45%)	1 984	80.3

N.B.: First Quarter : week of February 15-21
 Second Quarter : week of May 15-21
 Third Quarter : week of August 15-21
 Fourth Quarter : week of November 15-21

Source: Air Transport Monitor, Research Branch, Canadian Transport Commission.

Table 3.2.c

UNIT TOLL ACTIVITIES IN ALL* SECTORS

		Jet		Non-Jet		Total	
		Departures	Seats	Departures	Seats	Departures	Seats
			(000)		(000)		(000)
1Q	1978	6 448 (67%)	846.2 (91%)	3 174 (33%)	81.6 (9%)	9 622	927.8
2Q	1978	6 422 (65%)	834.5 (91%)	3 399 (35%)	86.2 (9%)	9 821	920.7
3Q	1978	6 876 (66%)	913.9 (92%)	3 556 (34%)	84.1 (8%)	10 432	998.0
4Q	1978	6 727 (67%)	860.9 (91%)	3 318 (33%)	82.9 (9%)	10 045	943.8
3Q	1983	6 619 (66%)	890.6 (91%)	3 436 (34%)	90.5 (9%)	10 055	981.1
3Q	1984	6 654 (63%)	912.7 (89%)	3 955 (37%)	110.8 (11%)	10 609	1 023.5
4Q	1984	6 322 (60%)	846.5 (87%)	4 256 (40%)	112.2 (13%)	10 578	968.7
1Q	1985	6 570 (58%)	883.6 (88%)	4 686 (42%)	126.2 (12%)	11 256	1 009.8
2Q	1985	6 813 (57%)	909.7 (87%)	5 098 (43%)	134.9 (13%)	11 911	1 044.6
3Q	1985	7 271 (57%)	988.0 (87%)	5 473 (43%)	151.0 (13%)	12 744	1 139.0
4Q	1985	6 818 (55%)	888.9 (86%)	5 591 (45%)	148.1 (14%)	12 409	1 037.0
1Q	1986	6 906 (51%)	899.6 (84%)	6 579 (49%)	167.7 (16%)	13 485	1 067.3
2Q	1986	6 996 (50%)	909.9 (83%)	7 117 (50%)	183.7 (17%)	14 113	1 093.6

* All sectors = southern, northern, transborders, international sectors

N.B.: First Quarter : week of February 15-21

Second Quarter : week of May 15-21

Third Quarter : week of August 15-21

Fourth Quarter : week of November 15-21

Source: Air Transport Monitor, Research Branch, Canadian Transport Commission.

where they have to develop their market strategies both in terms of their corporate objectives and in terms of their competitors' reactions.

3. CONDUCT AND PERFORMANCE

3.1 Labour Relations, Costs

Even before the liberalization in Canada of the controls over fares and route structures, airlines were compelled to find ways to reduce their costs to prevent an erosion of their profitability. Because of a downturn in air traffic resulting from the recession in the early 1980's, because of the post deregulation changes in the U.S. air transport industry and because labour constitutes an important cost component in the operations of air services, Canadian airlines, in response to threatening pressures emanating from liberalized regulation, have managed to obtain concessions which have resulted in reduced labour costs. Concessions were obtained through collective bargaining negotiations sometimes in the face of a strike. Only some of the recent agreements are presented to illustrate concession bargaining in the Canadian airline industry. They have to be viewed in the context of deregulation and the cost-cutting exercise of the last few years.

- In 1984, Air Canada's pilots accepted to extend their **work sharing agreement** for another year and to fly a maximum of 71 ¹/₄ hours per month instead of the usual 75 hours to save the jobs of 134 colleagues who, otherwise, would have been laid off.

- In a one year contract effective September 1, 1984, CPAL's pilots took a 7% **cut in salary** and a 3% cut in medical, dental and vacation benefits. For the airline president, the agreement was a "landmark" in Canada's new regulatory environment. Such cuts followed losses totalling around \$78 million over the previous three years.

- PWA, after a two month strike⁵ by its flight attendants, ticket clerks and machinists, was still sticking to its demands of concessions in the new contracts, concessions at least comparable to the ones obtained by Air Canada (after a long strike) and by CPAL. PWA wanted **more flexibility in work practices**, the **ability to hire more part-time employees** and the **right to reduce starting wages**.⁶ The flexibility in work practices that the carrier was interested in had to do with the introduction of "cross-utilization" also referred to as "job-sharing".⁷ Since the two national airlines had won most of these concessions in 1985, PWA's survival required it to bring labour contracts in line with those of its two major competitors. The PWA example is one among others illustrating the position taken by airlines in the negotiation of new labour contracts. Basically, airlines are looking at lean salaries and flexibility of their work force to keep their expenses at lower levels.

Other strategies used by airlines to reduce their labour costs are **voluntary early retirement programs** and **fleet standardization**. For instance, about 350 managers at CPAL (a quarter of the airline's total management team) have been offered an early-retirement incentive package a few months ago. CPAL had offered during 1985 a similar retirement incentive program to its non-management, non-unionized employees as well as to unionized employees.

To reduce costs, including labour costs, fleet standardization can also be used, as evidenced by a recent CPAL decision. CPAL is selling its four Boeing 747-200's to buy four McDonnell Douglas DC-10-30's which will eventually bring the number of DC-10-30's in their fleet to 12. Such a wide body standardization of CPAL fleet is aimed at increasing aircraft utilization, improving flight training efficiencies, reducing inventories and lowering expenses for engineering, maintenance, ramp and inventory handling and training. CPAL could save 10% per year on pilot wages and bonuses, since the DC-10 is lighter than the Boeing 747 and, with one less engine, has a lower wage scale for pilots.

Mergers identified in the previous section, like the EPA-CPAL one, are not free of labour issues, one of the important ones being the employees' seniority list to be used in the regrouped operations of the carriers involved. Such labour issues are important enough to be discussed during the negotiations preceding a merger decision and to prevent an agreement from being reached by the two parties.

As competition increases, airlines will continue to pressure the unions for concessions, labour being one of the few areas where airlines can achieve significant savings. But some measures can be taken to trim other expenses as well. For instance, to cut on fuel spending, taxiing out to the runways on one engine instead of two and installing lighter-weight seats offer some potential.

3.2 Fares

One of the objectives of the May 10, 1984 Domestic Air Policy was to offer more price/service options which means to be more responsive to consumer preferences. Since the policy allowed airlines to compete freely in price and service quality, one would expect that airlines have since offered more price/service variations. With fares less regulated, airlines are experimenting with so many plans that passengers travelling on the same flight can often pay widely different prices. Airlines now offer a wider variety of options, including lower fares at less desirable flight times, separate seating at higher prices for business travellers and discounts for advance reservations.

It is too early to assess the effects of the May 10 policy on price because airlines are still experimenting. It is however important to look for changes in the conduct of the industry in terms of its behaviour in setting prices. This section describes new options that have appeared since the liberalization of the industry, which are indicative of new trends. The approach selected here is an illustrated description of new fare/service combinations symbolic of potential trends.

- Most lower fares come with what the industry calls "fences". Fences are restrictions. Restrictions have to do with advance booking requirements and changes in travel plans. The lower the fare, the more restrictions attached to it. Some really cheap fares are even non-refundable if one has to cancel the flight. With competition, 'ticket rules' including restrictions on advance booking times are likely to start to erode. **Example:** On the Toronto-Montréal route, the country's busiest air route, lower fares

have continued to appear. In January of this year, Quebecair slashed its one-way fare from \$123 to \$59, no restrictions. This implied that passengers could reserve their ticket for same-day travel and choose their length of stay. While the fare's introduction corresponded to the time of the year when air travel usually declines, it was also aimed at competitors. In comparison, Air Canada charges \$123 for a regular one-way economy ticket, while passengers who book a month in advance and return not prior to the Wednesday after their departure can obtain a \$98 round-trip excursion fare, but bookings cannot be altered once made. City Express charges \$89 for a weekday daytime flight from Toronto Island to Montréal, including free transportation between airports and city centres.

- Discount fares are traditionally aimed at vacationers willing to accommodate their travel plans for cheaper rates, while economy and first class fares are directed more towards business travellers. As discount fares are becoming more common in an increasingly deregulated market, discount air travel is viable and accessible to more companies. A new trend has appeared which has to do with the introduction of price differences reflecting cost differences, thus making price differences non-discriminatory. **Example:** Such a price-service option is the newly introduced luxury services for business travellers. Air Canada's Executive Classfare is aimed at business traffic. A special section aboard aircraft has been set aside in designated cabins, mainly for business travellers, in the hope of giving them the comfort they feel they deserve, commensurate with the money their companies or they are paying in premium fares. Services offered include baggage handling, check-in, haute cuisine on an à-la-carte basis, linen trays, china, glassware, hot towels, a better choice of wines and liquors, electronic headsets and travel bonuses. Business class fares are, needless to say, higher. If such a marketing strategy is highly competitive on long distance international flights, its introduction on domestic flights assumes that the mark of restraint on the corporate travel sector is over, that the battle to assure corporate survival has been won, that a new wave, based on an old pre-recession corporate behaviour will draw business clients back to premium class travel comfort.

- In a more competitive environment, market strategies are oriented toward the improvement of market share. Price/service options have to differentiate somehow the product from competitors. **Example 1:** Air Canada's Executive Class, introduced in January 1986, came more than a year after Canadian Pacific Air Lines 'Attaché' Class. While the two main competitors cater to the same business travellers, differences between the two services can be observed. Attaché is offered on Boeing 737's. The Executive network is served by Air Canada's wide-body Boeing 767 fleet. In the case of CPAL service, only first class or Attaché passengers are on the aircraft, the entire plane being dedicated to business travellers, a total of 62 or 74 seats (depending on the type of Boeing 737) on a plane that would normally have 122 or 140 seats. The new configuration on Air Canada's Boeing 767's, which also carries First Class and Hospitality (the new name for Economy) passengers, has 48 seats dedicated to the Executive Class. Differences in the cushion space, the pitch and in the reclining capability of the seats can also be observed as well as other differences between the two competing services. **Example 2:** Air Canada, competing with Canadian Pacific Air Lines, is the first to offer air-to-ground telephone service on a Canadian airline.

- The increased competitiveness under which airlines have to operate forces competing airlines to match their competitor's strategy.

Example: In January 1986, Canadian Pacific Air Lines announced a 'clearance sale' offering tickets for February at savings of up to 82 per cent. A few days later, Air Canada matched CPAL winter clearance seat sale.

- An innovative marketing strategy brought "brand loyalty" back to the airlines. **Example:** The strategy, called frequent flyer program, is geared to clients on expense accounts and is a highly competitive marketing strategy. With such programs, carriers offer free or discounted tickets, hotel rooms and car rentals as well as all-expense-paid holidays to passengers who accumulate various levels of travel kilometres. The programs were originally introduced in the United States and, prior to May 10, 1984, similar incentives were not readily available in Canada. When regulation was eased regarding the offering of travel incentives, Air Canada and CPAL introduced frequent flyer programs. Air Canada's 'Aeroplan' features reduced rate or free transportation with credits based on the distances flown. By the end of July 1984, PWA, British Airways, Lufthansa, Hilton International Canada and Budget Rent-A-Car had joined the Air Canada program. CPAL introduced its 'Travel Bonus Program' awarding points for flying CPAL, staying at CP or Delta Hotels or renting cars from Budget or Tilden. At Air Canada, the newest bonuses for frequent travellers are high technology products, travellers being now able to cash in kilometres for a dictaphone or typewriter, a cellular phone or a portable computer. The recent government decision to require people who take a free trip from an airline to declare it on their income tax might jeopardize these programs, if a way to monitor them was to be found.

- With fares generally unregulated, airlines now offer a wider variety of options. Passengers in heavily travelled long-distance markets gained the most, as increased competition brought greater choice in fares. **Example:** To illustrate this general observation, the February 1986 Toronto-Vancouver fare offerings can be used. CPAL offered 22 different price tags on seats between Toronto and Vancouver, the low end being \$199 and the high end \$1,210. Between the same two cities, Air Canada had 28 different prices. The lowest CPAL price came with the airline's cuts on all its Canadian fares by up to 82% for flights between February 1 and March 6 of this year. Without the special February rate, the lowest price was \$268 return and required one to book 30 days before travelling and to pay within 14 days and to leave on a Tuesday or Wednesday before June 16. The same \$268 deal was offered by Air Canada. Both carriers were offering youth standby at \$432 return (but last moment bumping is possible). For the top CPAL price (\$1,210), a second ticket for a child between the ages of 2 and 11 was \$806 return, and, on the family plan, the spouse's fare was \$1,008. On Air Canada's Executive Class, the price was \$910 return and \$755 for the spouse on the family plan; the hospitality class was \$864 return, a ticket for an accompanying child under the age of 12, \$576 and \$717 return for a family plan ticket. Senior citizens (over 65) qualified for a special \$648 return fare. On a roundtrip excursion fare, senior citizens paid \$432 during the high-travel seasons, \$346 at other times, with requirements of 14 days advance booking, staying at least one Sunday, returning within 180 days and paying \$50 to cancel any portion of the ticket or make any booking changes.

3.3 Services

Markets where more than one airline were providing non-stop service in the first quarter of 1978, 1985 and 1986 are identified in Table 3.3. In 1986, a total of 83 domestic markets had more than one airline offering non-stop services (13 of which had only a unidirectional competitive situation). This indicator of the state of competition was also associated with a hub classification of the communities from which air services originated and/or terminated. Communities can be classified as large, medium or small hubs on the basis of the percentage of total passenger enplanements at that location. If at least 20% of unit toll passengers carried by Canadian and U.S. carriers in Canadian domestic and transborder services board a plane at a particular community, it is classified as a large hub; from 2 to 20%, a medium hub; from 0.45 to 2% a small hub. (A list of Canadian communities in each hub category is provided in Table 3.4.)

According to Table 3.5, 19 O/D markets where a competitive situation prevailed in 1986 (eight of which had unidirectional competition only) had neither one of its two cities classified as a hub. This indicates that if competition and traffic density are closely related, traffic density is not the sole justification of competition. Of the 83 competitive markets, 32 had both an origin and a destination classified as a hub, sixteen of which involved a medium hub to another medium or large hub. This reinforces the earlier observation that competition is not solely seen in the densest markets. However, it is interesting to note that Toronto and Vancouver are the two communities benefitting the most from competitive air services to other communities, Toronto having competitive air services with 15 other communities as opposed to 16 for Vancouver.

If one looks at the relative number of seats being offered by the competitive carriers in the 83 markets, one can note that in 25 of them, the share of the dominant carriers dropped indicating for these markets an increase in the competitiveness of air services between the first quarter of 1985 and the first quarter of 1986. This improvement in the prevailing level of competition came mostly, if not solely, from services introduced by smaller airlines such as norOntair, Burrard Air Ltd., Time Air Ltd., Skylink Airlines, Northwest Territorial Airways, Austin Airways Ltd., CP Air Commuter, Tropical Helicopter Airways Inc., Quebec Aviation Ltd., Air Ontario, Voyageur Airways Ltd. and AirBC Ltd. All in all, more markets were served in 1986 by competing airlines. The exclusion of through-plane⁸ and connecting services in the assessment of the level of competition understates the level of competition and of passenger choice in some markets. For example, in February 1986, Air Canada was the only airline with direct flights between Calgary and Ottawa but, between the same two points, Air Canada's connecting services were competing with CPAL's.⁹

At the same time, it is noted that changes in the route structure of CPAL, Air Canada and PWA, dropping from their services, markets like Québec-Montréal, Montréal-Vancouver, Winnipeg-Calgary, Winnipeg-Toronto, Edmonton (Mun.)-Calgary and St. John's-Deer Lake, resulted in a deterioration of the competitiveness prevailing in those markets.

Table 3.3

HUB CLASSIFICATION OF THE CITY-PAIRS WITH COMPETITIVE
NON-STOP SERVICES

	Distance km	1984	Dominant carrier		
		Passenger (domestic) Inbound & outbound	(% share of seats offered in first quarter of		
		1978	1985	1986	
<u>Large hub-medium hub</u>					
Toronto-Edmonton	2 689	273 580	AC(100%)	AC (62%)	AC (74%)
Toronto-Halifax	1 288	244 740	AC(100%)	AC (71%)	AC (57%)
Toronto-Ottawa	363	623 710	AC (88%)	AC (73%)	AC (63%)
Toronto-Montréal	502	1 084 900	AC (87%)	AC (63%)	AC (68%)
Toronto-Vancouver	3 345	495 260	CP (50%)	AC (52%)	AC (54%)
Toronto-Winnipeg	1 503	305 410	CP (58%)	AC (61%)	AC (60%)
Toronto-Calgary	2 688	395 720	AC (84%)	AC (56%)	AC (70%)
<u>Large hub-small hub</u>					
Toronto-Québec	733	97 200	AC(100%)	AC (59%)	AC (56%)
Toronto-Thunder Bay	910	172 050	AC (82%)	AC (60%)	AC (45%)
Toronto-London	142	20 830	GX (82%)	GX(100%)	GX(100%)
<u>Large hub-non hub</u>					
Toronto-Sault Ste. Marie	494	97 280	TZ (51%)	ND (66%)	ND (70%)
Toronto-Elliott Lake	376	1 080	-	WJ(100%)	UH (55%)
Toronto-Sudbury	341	69 460	AC(100%)	AC (69%)	AC (70%)
Toronto-North Bay	299	25 140	AC(100%)	AC (83%)	AC (86%)
Toronto-Mingan	1 390	-	QBC(67%)*	-	-
<u>Medium hub-medium hub</u>					
Edmonton-Vancouver	810	353 100	AC (75%)	AC (63%)	AC (51%)
Edmonton-Edmonton (Mun.)	28	-	PW(100%)	PW(100%)	PW (60%)
Edmonton-Calgary	246	362 100	PW(100%)	CP (40%)	PW (54%)
Edmonton (Mun.)- Calgary	275	362 100	PW (95%)	PW (87%)	PW (90%)
Edmonton-Winnipeg	1 187	97 330	CP (60%)	AC(100%)	AC(100%)
Halifax-Montréal	804	117 590	AC(100%)	AC (71%)	AC (60%)
Ottawa-Halifax	954	91 290	AC(100%)	AC(100%)	AC (54%)
Ottawa-Montréal	151	30 860	AC (82%)	AC (78%)	AC (67%)
Ottawa-Mirabel	134	-	AC (57%)	7F(100%)	7F(100%)
Vancouver-Winnipeg	1 864	178 920	AC(100%)	AC (60%)	CP (50%)
Vancouver-Calgary	687	436 810	AC (73%)	AC (42%)	AC (47%)
Winnipeg-Calgary	1 191	128 430	AC (72%)	AC (62%)	AC(100%)
Vancouver-Montréal	3 682	149 130	AC(100%)	AC (78%)	AC(100%)
<u>Medium hub-small hub</u>					
Halifax-St. John's	881	92 210	AC(100%)	PV (52%)	AC (50%)
Ottawa-Québec	368	31 660	AC(100%)	AC(100%)	AC (77%)
Ottawa-London	505	38 750	AC(100%)	AC (67%)	AC (55%)
Winnipeg-Thunder Bay	601	35 780	TZ (54%)	AC (86%)	ND (52%)
Montréal-Québec	234	90 170	AC (55%)	QB (65%)	QB (62%)
Winnipeg-Regina	532	52 910	AC(100%)	PW (50%)	PW (58%)
Calgary-Regina	661	84 820	AC(100%)	PW (59%)	PW (57%)
Vancouver-Prince George	524	111 800	CP(100%)	CP (58%)	CP (74%)
Vancouver-Victoria	62	33 750	PW (62%)	CPC(40%)	CPC(40%)
Winnipeg-Saskatoon	707	69 950	AC(100%)	PW (62%)	PW (54%)
Calgary-Saskatoon	518	64 080	AC(100%)	PW (76%)	PW (73%)
Vancouver-Kelowna	287	127 780	PW(100%)	PW (93%)	PW (77%)

Table 3.3 (Cont'd)

	Distance km	1984 Passenger (domestic) Inbound & outbound	Dominant carrier (% share of seats offered in first quarter of		
			1978	1985	1986
<u>Medium hub-non hub</u>					
Vancouver-Campbell River	173	20 670	PW(100%)	PW (73%)	CPC(57%)
Vancouver-Nanaimo	52	240	ZX (60%)	CPC(58%)	CPC(52%)
Edmonton-Yellowknife	1 018	30 250	PW(100%)	PW(100%)	PW (65%)
Montréal-Fredericton	562	27 050	PV (54%)	PV (52%)	AC (52%)
Val d'Or-Montréal	421	45 460	AC (45%)	ND(100%)	ND(100%)
Halifax-Sydney	305	38 150	PV (57%)	AC (54%)	CP (57%)
Halifax-Charlottetown	159	20 000	PV(100%)	PV (62%)	CP(100%)
Halifax-Saint John	192	22 850	AC (63%)	AC (44%)	CP (66%)
Halifax-Fredericton	260	21 510	PV(100%)	PV (78%)	CP(100%)
Vancouver-Kamloops	258	64 890	PW(100%)	PW (61%)	PW (59%)
Edmonton (Mun.)- Lloydminster	230	1 480	-	NK(100%)	NK (72%)
Edmonton (Mun.)- Peace River	388	8 850	-	KI (65%)	KI(100%)
Edmonton (Mun.)- Ft. McMurray	372	51 750	-	PW (88%)	PW (87%)
Ottawa-Sudbury	423	12 850	AC(100%)	AC(100%)	ND (70%)
Ottawa-Frobisher Bay	2 097	2 010	-	ND(100%)	7F (59%)*
Vancouver-Powell River	119	-	PW(100%)	CPC(100%)	CPC(69%)
Vancouver-Comox	136	4 710	PW(100%)	CPC(53%)*	CPC(66%)
Montréal-Sept Iles	770	34 120	AC (59%)	QB(100%)	-
Montréal-Saint John	614	28 010	AC (63%)	AC/PV(50%)	AC (54%)
Montréal-Val d'Or	420	45 640	ND (63%)	ND(100%)	ND(100%)
Vancouver-Port Hardy	343	18 970	-	-	PW (70%)
Vancouver-Quesnel	431	13 420	PW(100%)	PW (74%)*	PW (66%)*
Vancouver-Terrace	694	48 300	CP(100%)	PW (59%)*	CP (66%)*
Williams Lake- Vancouver	343	17 500	PW(100%)	PW (74%)*	PW (66%)*
<u>Small hub-small hub</u>					
Québec-London	875	1 740	AC(100%)	AC(100%)	AC (88%)
Regina-Saskatoon	238	-	NK(100%)	NK (89%)	NK (75%)
Thunder Bay-St. John's	2 698	580	-	PV (75%)*	-
<u>Small hub-non hub</u>					
St. John's-Deer Lake	385	27 290	PV(100%)	PVC (71%)	-
Thunder Bay-Sault Ste. Marie	417	5 670	TZ(100%)	ND(100%)	ND (89%)
St. John's- Stephenville	444	16 800	-	PVC (67%)	CP(100%)
Québec-Saguenay	173	770	QB (88%)	QR (56%)	QB (66%)
Prince George- Dawson Creek	262	3 620	PW(100%)	PW (91%)	PW (55%)
Kelowna-Kamloops	111	160	PWC(100%)	PW (70%)	PW (61%)
Québec-Sept Iles	535	28 750	QB (61%)	QB (66%)	QB (73%)
Thunder Bay-Kenora	400	1 560	-	JV(100%)	UH (63%)
Thunder Bay-Sudbury	668	10 650	AC(100%)	AC(100%)	ND (70%)
Cranbrook-Kelowna	162	4 620	PW (77%)*	PW(100%)	PW(100%)
Kelowna-Penticton	58	480	PWC(67%)*	PW (87%)	PW (91%)
Prince-George-Kamloops	385	4 820	PW (86%)	-	-
Lloydminster-Saskatoon	260	420	-	NK (72%)	NK(72%)*
St. John's-Gander	200	18 020	PV(100%)	PV (73%)*	CP(100%)
Williams Lake-Prince George	194	210	PWC(100%)	-	PW(90%)*

Table 3.3 (Cont'd)

	Distance km	1984	Dominant carrier		
		Passenger (domestic)	(% share of seats offered in first quarter of		
		Inbound & outbound	1978	1985	1986
<u>Non hub-non hub</u>					
Baie Comeau-Mont Joli	57	210	QB(100%)	QB (86%)	QB (90%)
Baie Comeau-Sept Iles	183	280	QB(100%)	QB (70%)	QB (64%)
Campbell River-Comox	38	-	-	PW (68%)*	CPC(62%)
Campbell River-Port Hardy	170	590	-	PW (52%)	CPC(100%)
Castlegar-Cranbrook	138	-	PW (92%)	-	-
Frobisher Bay-Hall Beach	795	520	ND (76%)	ND(100%)	ND(100%)
Fredericton-Saint John	79	-	PV (61%)	PVC (65%)*	-
Fort Severn-Big Trout Lake	283	-	-	-	JV UH(50%)
Fort Simpson-Yellow- knife	362	650	PW(100%)	PW (63%)	NV(100%)
La Grande-Kuujuarapik	184	240	-	ND(100%)	ND (78%)
Gods Narrows-Oxford House	66	-	UW(100%)	-	MO (72%)
Pond Inlett-Nanisivik	221	-	-	7F(100%)	4K 7F(50%)
Rouyn Noranda-Val d'Or	80	100	AC (85%)	AC (64%)	AC (63%)*
Rupert House-Moosonee	130	-	UH(100%)	UH(100%)	UH (75%)
Manitowadge-Maraton	55	-	-	UH(100%)	UH (84%)
North Bay-Sudbury	110	-	HF (53%)	NR (46%)	NR (56%)
Timmins-Kapuskasing	123	-	NR(100%)	NR(100%)	UH (53%)
Ft St. John-Ft Nelson	310	3 000	CP(100%)	CP (96%)	CP(100%)
Mingan-Natashquan	159	-	QBC(67%)	-	-
Chibougamau-Matagami	242	-	ND*(93%)*	-	-
Quesnel-Williams Lake	100	-	PW (88%)*	PW (66%)*	PW (66%)*
Resolute-Hall Beach	811	-	TZ (68%)*	-	-
Terrace-Prince Rupert	123	-	CP (92%)*	CP(100%)	CP(100%)
Cambridge Bay- Yellowknife	848	1 080	PW(100%)	PW (89%)*	PW (70%)*
Cochrane-Timmins	65	-	-	NR (81%)*	UH(100%)
Sept Iles-Saguenay	402	330	QB(100%)	QB (72%)*	QB (80%)
Old Crow-Yellowknife	1 303	-	-	-	PW (70%)*
Gods Narrows-Island Lake	79	-	UW(100%)	UW(100%)	UH (63%)*
Island Lake-St. Therese Pt.	13	-	-	UW(100%)	UW (82%)*
St. Therese Pt.- Gods Narrows	83	-	-	-	MO (70%)*
Thompson-Gillam	206	-	TZ*(100%)	-	PW* (66%)*
Round Lake-Sioux Lookout	318	-	-	JV(100%)	JV (75%)*

Source: Office Airline Guide; Statistics Canada, Publication No. 51-204.

N.B. : * indicates unidirectionality in the competitiveness of the non-stop services.

Carrier codes: AC, Air Canada; CP, CP Air; CPC, CP Air Commuter; GX, Air Ontario; HF, First Air; JV, Bearskin Lake Air Service Ltd; KI, Time Air Ltd; MO, Calm Air International Ltd; ND, Nordair; NK, Norcanair; NR, norOntair; NV, Northwest Territorial Airways Ltd; PV, Eastern Provincial Airways; PVC, Eastern Provincial Airways Commuter; PW, Pacific Western Airlines; QB, Quebecair; QBC, Quebecair Commuter; QR, Quebec Aviation Ltd; TZ, Transair; UH, Austin Airways Ltd; UW, Perimeter Airlines (Inland) Ltd; WJ, Torontair; ZX, AirBC Ltd; 4K, Kenn Borek Air Ltd; 7F, First Air.

Table 3.4

DOMESTIC JOURNEYS-TOTAL OUTBOUND
AND INBOUND PASSENGERS IN 1984

(,000 Passengers)

		Level I <u>Carriers</u>	Level II to IV <u>Carriers</u>	<u>Total</u>
<u>LARGE HUBS</u> (more than 20% of all 1983 enplanements)				
Toronto	(26.5%)	4 801.0	302.2	5 103.2
<u>MEDIUM HUBS</u> (2 to 20% of all 1983 enplanements)				
Vancouver	(13.3%)	2 753.6	522.1	3 275.7
Montréal	(12.4%)	2 384.8	95.7	2 480.5
Calgary	(8.4%)	2 026.4	121.3	2 147.7
Edmonton	(6.2%)	1 710.5	129.6	1 840.1
Winnipeg	(4.7%)	1 242.1	70.7	1 312.8
Ottawa	(4.5%)	1 478.7	138.3	1 617.0
Halifax	(3.2%)	847.5	*	847.5
<u>SMALL HUBS</u> (0.45 to 2% of all 1983 enplanements)				
Regina	(1.3%)	429.7	52.2	481.9
Saskatoon	(1.3%)	412.1	53.3	465.4
Victoria	(1.2%)	350.8	296.0	646.8
Québec	(1.2%)	394.1	32.9	427.0
St. John's	(1.1%)	406.1	4.5	410.6
Thunder Bay	(1.0%)	312.7	57.4	370.1
Kelowna	(0.8%)	257.5	35.3	292.8
Prince George	(0.5%)	173.6	5.7	179.3
London	(0.5%)	157.0	176.9	333.9
Moncton	(0.5%)	178.6	Nil	178.6
		<u>3 072.2</u>	<u>714.2</u>	<u>3 786.4</u>
<u>HUBS SUB-TOTAL</u>				
		20 316.8	2 094.1	22 410.9
<u>(% OF TOTAL)</u>				
		(85.5%)	(51.1%)	(80.4%)
<u>TOTAL</u>				
		23 768.6	4 094.5	27 863.1

* Confidential

Sources: Statistics Canada, Catalogue 51-204, Statement 4.

Table 3.5

HUB CLASSIFICATION OF THE NUMBER OF CITY-PAIRS
WITH COMPETITIVE NON-STOP SERVICES IN 1986

To From	Medium Hub	Small Hub	'Other'
Large Hub	7 (28.8%)	2 (2.3%)	4 (1.6%)
Medium Hub	9 (13.2%)	12 (7.0%)	18 (3.7%)
Small Hub		2 ()	10 (0.4%)
'Other'			19 ()

(% of total 1984 O/D traffic of Level I carriers).

The May 10, 1984 Policy, by removing licence restrictions, allowed licence consolidations which resulted in adjustment of service patterns from which major new non-stop routes were created. Licence consolidations gave to the carriers the freedom to fly from any point to any other point on their system. For regional carriers, hardly any new points were added to their network. But it is interesting to note that the removal of licence restrictions allowed, for example, Nordair to carry local traffic between Montréal and Québec, and that Nordair's licence consolidation allowed them to service Québec-Ottawa, a route already operated by Quebecair and Quebec Aviation. As well, Nordair's consolidated licences allowed the carrier to inaugurate an Ottawa-Sudbury-Thunder Bay-Winnipeg routing with Boeing 737 equipment on July 14, 1985, the same day that Air Canada dropped the route from its service and that Air Ontario started a parallel route with Convair 580's. This example is also indicative of a new trend which has resulted from the May 10 Policy: local service carriers are competing with their turboprop equipment with pure jets within some markets.

Local carriers were quick to take advantage of the new Canadian air policy and to move to create competitive situations. They even showed a willingness to compete in low density markets. For instance, Austin Airways was awarded the Toronto-Elliot Lake (Ontario) route, a route which puts Austin in competition with Torontair. Toronto-North Bay and Toronto-Sudbury, served by Air Canada from Pearson International, and by Voyageur Airways from Toronto Island, interested Air Ontario and Nordair who both applied to serve these points. But the evidence available so far indicates that the industry is still adapting to the new regulatory environment. Airlines are experimenting with service. For example, in the fall of 1984, Air Canada entered the Edmonton (Mun.)-Calgary market with a daily frequency of two flights while PWA was offering 17 daily flights on the same route, flown also by Time Air with Dash 7 equipment. After a year of poor load factors, Air Canada dropped the route.

Local service carriers took advantage of the increased freedom to enter markets. For instance, out of a total annual traffic of 600,000 passengers between Vancouver and Victoria in 1984, only 33,800 were carried by Level I carriers. Vancouver-Victoria air travellers are given a choice of carriers and they face a great variety of services, equipment and fares.

3.4 Efficiency

Critics have argued that the air transport industry has used a high proportion of the improved efficiency resulting from aircraft design to overpay staff and indulge in inefficient practices. Bearing in mind such criticisms, and the fact that labour represents a very important cost element in operating an airline, it is important to track recent trends in the efficiencies with which air services have been provided in Canada. For this purpose, simple output per employee or output per labour dollar ratios are used. Such efficiency measures have the advantage of being easy to calculate. They are absolute measures which offer the possibility of tracking whether efficiency trends are along the lines of those expected under a more competitive environment.

The most recent year for which complete information is available is 1984. But, as previously indicated, pressures on Canadian airlines to improve the efficiency of their operations came first from deregulated U.S. carriers and then from the recession and lastly from the competitive forces which resulted from the May 10, 1984 Policy. As indicated in Table 3.6, airlines between 1981 and 1984 did manage to lower their labour costs per passenger. The new Policy and the resulting increased competition have forced airlines to seek further cost reductions. Recent strategies such as route changes, withdrawal from markets where profitable competition is not possible, concession bargaining, etc., suggest that the trend observed between 1981 and 1984 was maintained if not intensified.

4. CONCLUSION

The May 10, 1984 new Domestic Air Policy has unleashed the powerful forces of competition into a field that had been rather tightly controlled. Continuing emphasis on competition has been and will continue to be beneficial to consumers. They have benefitted through innovative fares and new or expanded services. Travel bonus-type programs, business travellers-type products and vacation tour products are indicative of a more and more intense market segmentation.

Increased competition has resulted in more direct services and more product offerings. All high and medium density routes west of Toronto are flown by Air Canada; CPAL flies most of these routes and PWA and Nordair are actively present on many. However, the expansion of air services into markets occurred mostly on short haul routes. Domestic mature routes are the type of routes where a choice of carriers and a great variety of services, equipment and fares are offered to consumers.

New alliances, affiliations, mergers, buy-outs and even shared investments have appeared between large and small carriers since partial deregulation was implemented. Some low density and very short haul markets are no longer served by the large carriers. But, when an airline drops direct services to a route, it arranges either for a replacement carrier or for a different pattern of service on the route. Additional frequencies on individual routes by new competitors have resulted, in some instances, in fewer passengers on each aircraft and in smaller aircraft being used. In an increasingly competitive market, concessions such as lower starting wages, longer hours and increases in part-time positions have been asked from unions by the airlines in order to improve their efficiency. The extensive transport policy changes announced in July 1985 in a policy position paper entitled **Freedom to Move** and embodied in the proposed National Transportation Act (1986) is one more step toward a wider range of air services and the lowest possible costs.

Table 3.6

EFFICIENCY INDICATORS

Passengers Flown Per Employee

<u>Carriers' Level</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Level I	681	579	555	610
Level II	967	869	794	833
Level III	321	333	270	203

Hours Flown Per Employee

<u>Carriers' Level</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Level I	16.6	16.1	15.6	16.2
Level II	79.6	88.4	85.6	100.7
Level III	145.9	153.2	164.4	168.6

Labour Cost Per Passenger Flown

<u>Carriers' Level</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Level I	\$ 52	\$ 58	\$ 55	\$ 45
Level II	\$ 25	\$ 29	\$ 31	\$ 26
Level III	\$ 75	\$ 74	\$ 92	\$ 115

Labour Cost Per Hour Flown

<u>Carriers' Level</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Level I	\$2 134	\$2 095	\$1 975	\$ 1 699
Level II	\$ 309	\$ 290	\$ 290	\$ 213
Level III	\$ 165	\$ 162	\$ 151	\$ 139

Source: Statistics Canada, Catalogue No. 51-002.

FOOTNOTES

- ¹ Roger Roy is the A/Director of Economic and Social Research, Research Branch, Canadian Transport Commission. The author's debts are too numerous to mention but Eric Mainville, Marie Bellavance and Richard Fosbrooke have to be cited for special thanks.
- ² Level I airlines: Air Canada, Canadian Pacific Air Lines, Pacific Western Airlines, Nordair, Quebecair, Eastern Provincial Airways, Wardair.
- ³ Passengers and revenue passenger-kilometres reported here are not limited to domestic operations.
- ⁴ See Canadian Transport Commission, Research Branch, Air Transport Monitor, Vol. 2, No. 1.
- ⁵ PWA's employees strike started on November 25, 1985.
- ⁶ The reduction of starting wages is known as the two-tier system. It allows newly hired employees to be paid lower salaries.
- ⁷ Job sharing = flexibility = more work for fewer employees = cost savings.
- ⁸ Through-Plane Service: air transport service provided between two points such that passengers can make the trip on the same aircraft, without disembarking during stops en route.
- ⁹ According to the services listed in the Official Airline Guide, for the Calgary-Ottawa market, there was in the first week of February 1986, 14 direct Air Canada flights as opposed to 33 connecting Air Canada flights, 28 connecting CPAL flights, 16 possible connections between Nordair and Air Canada services, 13 between Air Canada and PWA and one between Nordair and CPAL.

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INTRODUCTION

The Air Transport Monitor is prepared by staff of the Passenger Transport Studies and Economic and Social Research Directorates of the Research Branch of the Canadian Transport Commission. It is undertaken with the intent of collecting and disseminating information on service levels, air fares, and air carrier operations as may be of assistance to the consideration of competition and regulation in the Canadian air transport industry.

The objective of the Air Transport Monitor is to provide the reader with a concise discussion of changes which are taking place in the air transport market in Canada. To this end, it analyzes trends and highlights developments in the Canadian air transport industry during the quarter under study. The present issue of the report consists of two parts.

Part I, "Overview of the Canadian Air Industry", presents a broad snapshot of the industry by providing information on traffic, capacity, prices and operating performance.

Part II, "Market Analysis", presents a detailed examination of scheduled services and prices in a specific domestic market. For this purpose, Canada is divided into five distinct geographic regions, namely, Atlantic, Central (Québec and Ontario), Prairies, Pacific (British Columbia) and Northern. Each issue focusses on one or two of these regions.

All Aviation Statistics Centre (ASC) data not yet published by the ASC should be considered preliminary. Questions pertaining to any aspect of the report should be addressed to the Executive Director, Research Branch, Canadian Transport Commission, Ottawa, Ontario K1A 0N9 or telephone (819) 997-2830.

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Part I

OVERVIEW OF THE CANADIAN AIR INDUSTRY

This part of the report presents a broad overview of the airline industry in Canada. Part I is divided into three separate sections. The first section presents quarterly data on the scheduled and charter operations of Level I carriers for 1984, 1985 and the first quarter of 1986. In addition, this section also provides some data on the operating revenues and expenses of these carriers between 1981 and 1985. The second section presents a summary of scheduled carrier activity in terms of the number of seats and departures offered by these carriers as well as a discussion of major changes in services. The third and final section presents a discussion of domestic and transborder air fare indices for both economy and discounted fares.

OPERATING PERFORMANCE

This section of the report focusses on general indicators of operating performance for Level I carriers in the domestic, transborder and international markets. Data presented in Air Transport Monitor, Volume 2, Number 2, has been updated to include the last quarter of 1985 and the first quarter of 1986 of the scheduled services (Tables 1.1 to 1.4) and the charter operations (Tables 1.5 to 1.8) of Level I carriers.

Also included in this section are some partial performance measures of Level I carriers from 1981 to 1985. Table 1.9 shows the average annual change, by carrier in scheduled performance measures over this period while Tables 1.10 to 1.13 present revenues and costs per hour flown.

Scheduled Air Services

Total passenger revenues for the scheduled activities of Level I carriers increased by 9% from 1984 to 1985. The largest percentage increase in passenger revenues was observed in the international market (15%) followed by increases of 8% and 5% in the domestic and transborder markets respectively. Total RPK's for scheduled services increased by 5% during the year, with the greatest percentage increase again being shown by the international market segment (15%) followed by the domestic market with an increase of 2% and the transborder market where a 4% decline in RPK's was observed.

The yield for scheduled services as a whole increased slightly in 1985 to 9.4¢ per RPK from 9.1¢ in 1984, while the annual load factor experienced a marginal decline from 67% to 65.2%. With respect to the three market segments, yields increased slightly in the domestic and transborder markets and remained unchanged in the international market. As far as load factors were concerned, there was a small improvement in the transborder market while load factors in both the domestic and international markets experience a slight decline.

During the first quarter of 1986, total passenger revenues for scheduled service were some 5% higher than in the same quarter in 1985. This increase was due almost exclusively to operations in the international market which showed a 22% increase in revenues over the period. In the domestic and transborder markets, passenger revenues in the first quarter of 1986 were less than 1% higher than in the same period in 1985.

A comparison of RPK's for the scheduled activities of Level I carriers also reveals an increase of 5% from the first quarter of 1985 to the first quarter of 1986. The highest percentage increase in RPK's (8%) was again observed in the international market, followed by the transborder and domestic markets with increases of 6% and 4% respectively.

Charter Air Services

A detailed analysis of the charter operations of Level I carriers in 1984 and the first three quarters of 1985 can be found in the Air

Table 1.1

DOMESTIC SCHEDULED AIR SERVICES
LEVEL I CARRIERS

1984-86

	Passenger Revenues			Revenue Passenger-Kilometres			Yield (Cents/RPK)			Load Factor*		
	1984 (\$000)	1985 (\$000)	1986 (\$000)	1984 ('000)	1985 ('000)	1986 ('000)	1984	1985	1986	1984 %	1985 %	1986 %
First Quarter	421 165	454 705	456 915	3 763 999	3 951 210	4 096 786	11.2	11.5	11.2	58.9	58.1	59.0
Second Quarter	501 639	553 864	..	4 749 461	4 871 189	..	10.6	11.4	..	68.7	63.9	..
Third Quarter	551 767	592 542	..	5 506 721	5 446 153	..	10.0	10.9	..	72.1	65.7	..
Fourth Quarter	471 154	492 030	..	4 281 772	4 389 974	..	11.0	11.2	..	61.4	59.7	..
Annual Total	1 945 725	2 093 141	..	18 301 953	18 658 526	..	10.6	11.2	..	65.6	62.1	..

Notes : * Available seat-kilometres were estimated for one carrier in order to calculate load factor.
Data are preliminary.
.. Not available.

Source : Air carrier statements filed with the Air Transport Committee.

Table 1.2

TRANSBORDER SCHEDULED AIR SERVICES
LEVEL I CARRIERS

1984-86

	Passenger Revenues		Revenue Passenger-Kilometres		Yield (Cents/RPK)			Load Factor	
	1984 (\$000)	1985 (\$000)	1986 (\$000)	1984 ('000)	1985 ('000)	1986 ('000)	1984	1985	1986
First Quarter	101 387	106 536	107 464	1 279 186	1 230 404	1 300 363	7.9	8.7	8.3
Second Quarter	100 029	105 129	..	1 138 926	1 055 519	..	8.8	10.0	..
Third Quarter	104 623	110 338	..	1 062 578	1 073 098	..	9.8	10.3	..
Fourth Quarter	92 870	97 208	..	1 135 426	1 084 585	..	8.2	9.0	..
Annual Total	398 909	419 211	..	4 616 116	4 443 606	..	8.6	9.4	..
							61.5	61.8	..

Notes : Data are preliminary.
.. Not available.

Source : Air carrier statements filed with the Air Transport Committee.

Table 1.3

INTERNATIONAL SCHEDULED AIR SERVICES
LEVEL I CARRIERS

1984-86

	Passenger Revenues			Revenue Passenger-Kilometres			Yield (Cents/RPK)			Load Factor		
	1984 (\$000)	1985 (\$000)	1986 (\$000)	1984 ('000)	1985 ('000)	1986 ('000)	1984	1985	1986	1984 %	1985 %	1986 %
First Quarter	136 929	164 642	200 092	2 006 708	2 636 588	2 836 954	6.8	6.2	7.1	64.8	72.1	63.4
Second Quarter	195 096	228 177	..	2 862 535	3 307 057	..	6.8	6.9	..	73.3	73.8	..
Third Quarter	266 967	290 114	..	3 895 062	4 135 633	..	6.9	7.0	..	79.5	76.9	..
Fourth Quarter	154 606	186 021	..	2 302 110	2 649 431	..	6.7	7.0	..	67.3	63.0	..
Annual Total	753 598	868 954	..	11 066 415	12 728 709	..	6.8	6.8	..	72.2	71.8	..

Notes : Data are preliminary.
.. Not available.

Source : Air carrier statements filed with the Air Transport Committee.

Table 1.4
TOTAL* SCHEDULED AIR SERVICES
LEVEL I CARRIERS

1984-86

	Passenger Revenues			Revenue Passenger-Kilometres			Yield (Cents/RPK)			Load Factor		
	1984 (\$000)	1985 (\$000)	1986 (\$000)	1984 ('000)	1985 ('000)	1986 ('000)	1984	1985	1986	1984 %	1985 %	1986 %
First Quarter	659 481	725 883	764 471	7 049 893	7 818 202	8 234 103	9.4	9.3	9.3	60.8	63.2	61.6
Second Quarter	796 764	887 170	..	8 750 922	9 233 765	..	9.1	9.6	..	69.0	66.6	..
Third Quarter	923 357	992 994	..	10 464 361	10 654 884	..	8.8	9.3	..	73.3	69.5	..
Fourth Quarter	718 630	775 259	..	7 719 308	8 123 990	..	9.3	9.5	..	63.4	60.7	..
Annual Total	3 098 232	3 381 306	..	33 984 484	35 830 841	..	9.1	9.4	..	67.0	65.2	..

Notes : * Includes domestic, transborder and international scheduled air services.
Data are preliminary.
.. Not available.

Source : Air carrier statements filed with the Air Transport Committee.

Table 1.5

DOMESTIC CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS

1984-1985

	Air Canada	CP Air	PWA	Nordair	Quebecair	EPA	Wardair	Total
<u>1984</u>								
First Quarter	0	208	5 193	2 389	0	0	4 804	12 594
Second Quarter	0	0	5 769	1 237	0	0	59 730	66 736
Third Quarter	0	1 720	25 357	3 042	0	0	130 208	160 327
Fourth Quarter	0	14 377	7 409	1 386	0	0	45 954	69 126
Annual Total	0	16 305	43 728	8 054	0	0	240 696	308 783
<u>1985</u>								
First Quarter	0	17 189	3 285	1 474	243	0	11 226	33 417
Second Quarter	0	13 966	3 785	835	0	0	86 983	105 569
Third Quarter	0	12 133	15 661	0	0	0	133 577	161 371
Fourth Quarter	0	7 413	4 952	950	186	0	47 614	61 115
Annual Total	0	50 701	27 683	3 259	429	0	279 400	361 472
<u>1986</u>								
First Quarter	0	3 098	2 280	939	0	0	20 925	27 242
Second Quarter	..	..	..	..	..	..	..	..
Third Quarter	..	..	..	..	..	..	..	..
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes : Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.6

TRANSBORDER CHARTER AIR SERVICES:
LEVEL I CARRIERS

1984-1985

	Air Canada	CP Air	PWA	Nordair	Quebecair	EPA	Wardair	Total
<u>1984</u>								
First Quarter	135 114	73 958	73 061	93 642	0	1 936	245 231	622 942
Second Quarter	54 037	40 101	37 611	58 508	1 711	2 029	77 128	271 125
Third Quarter	10 146	22 022	23 896	56 302	2 660	0	30 747	145 773
Fourth Quarter	34 953	58 076	44 248	66 191	2 830	0	123 353	329 651
Annual Total	234 250	194 157	178 816	274 643	7 201	3 965	476 459	1 369 491
<u>1985</u>								
First Quarter	127 939	81 433	96 146	90 405	17 754	4 042	285 509	703 228
Second Quarter	56 642	34 353	49 740	70 067	5 647	4 393	87 855	308 697
Third Quarter	21 341	10 885	40 051	54 270	7 673	0	38 410	172 630
Fourth Quarter	64 266	50 968	45 911	66 350	4 678	0	135 424	367 597
Annual Total	270 188	177 639	231 848	281 092	35 752	8 435	547 198	1 552 152
<u>1986</u>								
First Quarter	147 225	69 971	70 635	114 084	22 382	3 342	265 053	692 692
Second Quarter	..	..	..	..	..	..	..	..
Third Quarter	..	..	..	..	..	..	..	..
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.7

INTERNATIONAL CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS

1984-1985

	Air Canada	CP Air	PWA	Nordair	Quebecair	EPA	Wardair	Total
<u>1984</u>								
First Quarter	43 023	27 377	68 591	24 995	13 233	1 838	184 713	363 770
Second Quarter	10 819	11 502	17 900	22 753	15 825	624	189 827	269 250
Third Quarter	30 273	5 724	10 806	18 900	38 053	0	269 625	373 381
Fourth Quarter	1 545	13 007	18 771	32 054	20 184	0	111 863	197 424
Annual Total	85 660	57 610	116 068	98 702	87 295	2 462	756 028	1 203 825
<u>1985</u>								
First Quarter	7 724	30 744	66 440	38 969	68 259	1 697	150 753	364 586
Second Quarter	8 023	15 257	22 199	29 472	48 844	918	200 941	325 654
Third Quarter	22 175	14 743	10 594	17 232	54 896	0	275 452	395 092
Fourth Quarter	10 264	16 301	22 843	27 900	28 527	0	86 667	192 502
Annual Total	48 186	77 045	122 076	113 573	200 526	2 615	713 813	1 277 834
<u>1986</u>								
First Quarter	26 826	37 750	66 470	38 357	82 278	2 856	101 177	355 714
Second Quarter	..	..	..	..	..	..	..	..
Third Quarter	..	..	..	..	..	..	..	..
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: Data are preliminary.
.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Table 1.8

TOTAL* CHARTER AIR SERVICES: PASSENGERS
LEVEL I CARRIERS

1984-1985

	Air Canada	CP Air	PWA	Nordair	Quebecair	EPA	Wardair	Total
<u>1984</u>								
First Quarter	178 137	101 543	146 845	121 026	13 233	3 774	434 748	999 306
Second Quarter	64 856	51 603	61 280	82 498	17 536	2 653	326 685	607 111
Third Quarter	40 419	29 466	60 059	78 244	40 713	0	430 580	679 481
Fourth Quarter	36 498	85 460	70 428	99 631	23 014	0	281 170	596 201
Annual Total	319 910	268 072	338 612	381 399	94 496	6 427	1 473 183	2 882 099
<u>1985</u>								
First Quarter	135 663	129 366	165 871	130 848	86 256	5 739	447 488	1 101 231
Second Quarter	64 665	63 576	75 724	100 374	54 491	5 311	375 779	739 920
Third Quarter	43 516	37 761	66 306	71 502	62 569	0	447 439	729 093
Fourth Quarter	74 530	74 682	73 706	95 200	33 391	0	269 705	621 214
Annual Total	318 374	305 385	381 607	397 924	236 707	11 050	1 540 411	3 191 458
<u>1986</u>								
First Quarter	174 051	110 819	139 385	153 380	104 660	6 198	387 155	1 075 648
Second Quarter	..	..	..	..	..	..	..	..
Third Quarter	..	..	..	..	..	..	..	..
Fourth Quarter	..	..	..	..	..	..	..	..
Annual Total	..	..	..	..	..	..	..	..

Notes: * Includes domestic, transborder and international charter air services.

Data are preliminary.

.. Not available.

Source: Air carrier statements filed with the Air Transport Committee.

Transport Monitor, Volume 2, Number 2. This section serves to update the charter analysis with the addition of passenger data for the fourth quarter of 1985, and the first quarter of 1986.

The total number of charter passengers carried by Level I carriers in 1985 increased by over 300 000 (11%) from the 1984 total. While all three markets showed increases in 1985, the transborder market with an increase of better than 180 000 passengers accounted for most of the increase of total charter passengers carried.

All Level I carriers, with the exception of Air Canada, which had a marginal decline, experienced increases in their 1985 charter passenger carriage. Quebecair had the largest real increase in the actual number of passengers carried in 1985, with Wardair a distant second, followed closely by PWA and CPAL.

Wardair remains the dominant charter carrier in all three market segments. As has been the case in recent years, almost half of the total charter passengers in 1985, were carried by Wardair.

The number of charter passengers carried by Level I operators during the first quarter of 1986 declined marginally from the first quarter total of 1985 as three carriers, Wardair, PWA and CPAL experienced declines in the number of charter passengers carried by them. Although all three markets experienced slight declines in the first quarter of 1986, the international market showed the largest decrease in passenger numbers. This decrease was principally due to a substantial decrease shown by Wardair. It should be noted, however, that Wardair, beginning in the last quarter of 1985, initiated significant international scheduled operations, which would naturally result in a decline in its charter operations during the fourth quarter of 1985 and the first quarter of 1986. This shift between charter and scheduled activities also partially contributes to the larger revenue and RPK increases in the scheduled service international market mentioned above in "Scheduled Air Services".

Performance Measures

This section provides a brief discussion of performance measures of Level I carrier from 1981 to 1985. Table 1.9 outlines the average annual changes in performance measures, while Tables 1.10 to 1.13 provide data on operating revenues and expenses as well as specific costs per hour flown.

It is observed from Table 1.9 that operating revenues of Level I carriers as a whole have increased at an average annual rate of 4.8%. Over the same time period however, the operating expenses of these carriers increased at an average annual rate of 5.2%. Only two carriers, CPAL and Wardair managed to keep their average annual increases in operating expenses below their increases in operating revenues.

The average annual increase in fuel and oil costs between 1981 and 1985 for Level I carriers as a whole was 2.1%. Air Canada and CPAL with average annual increases of 1.0% and 1.1% respectively were the two carriers with the lowest increases in fuel and oil costs. Wardair followed with an

Table 1.9
SOME RECENT CHANGES IN LEVEL I CARRIER ACTIVITIES

Carrier	Average Annual Change Between 1981 and 1985 in :									
	Operating Revenues	Operating Expenses	Fuel and Oil Cost	Labour Cost	Hours Flown	Operating Revenues per Hour Flown	Operating Expenses per Hour Flown	Fuel and Oil Cost per Hour Flown	Labour Cost per Hour Flown	
Air Canada	3.9%	4.8%	1.0%	5.5%*	-0.8%	4.8%	5.7%	1.8%	6.4%*	
CPAL	5.3%	4.3%	1.1%	2.2%	1.6%	3.7%	2.7%	-0.5%	0.6%	
EPA	7.0%	11.2%	7.8%	9.8%*	2.5%	4.4%	8.5%	5.1%	7.1%*	
Nordair	8.1%	8.7%	8.5%	8.4%*	8.9%*	-0.7%	-0.1%	-0.3%	-0.4%	
PWA	2.5%	4.1%	4.6%	2.7%	-5.1%*	8.0%	9.6%	10.2%	8.2%*	
Quebecair	11.8%	12.1%	15.0%	10.5%*	-3.3%*	15.7%	15.9%	19.0%	14.3%*	
Wardair	7.7%	6.4%	2.2%	3.1%	2.9%	4.7%	3.4%	-0.7%	0.2%	
Level I Carriers	4.8%	5.2%	2.1%	4.8%*	-0.1%	4.8%	5.3%	2.2%	4.9%*	

Notes : Costs and Revenues are measured in current dollars.

Wardair's labour figures do not include general management and administration employees.

* Revised from Air Transport Monitor, Volume 2, Number 3, (August, 1986).

Sources : Aviation Statistics Centre, Catalogue 51-002.

Air carrier statements filed with the Air Transport Committee.

Table 1.10

OPERATING REVENUES PER HOUR FLOWN

(Dollars)

<u>Carriers</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	7 365	7 122	6 670	6 339	6 112
CPAL	8 414	8 540	7 934	7 520	7 289
EPA	3 844	3 295	3 503	3 514	3 239
Nordair	3 636	3 922	3 925	3 797	3 736
PWA	5 653	5 895	5 738	5 154	4 157
Quebecair	4 609	5 509	3 628	3 169	2 575
Wardair	11 109	10 602	10 198	10 393	9 257
Total Level I	7 007	6 984	6 583	6 253	5 802

Table 1.11

OPERATING EXPENSES PER HOUR FLOWN

(Dollars)

<u>Carriers</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	7 359	6 990	6 582	6 414	5 905
CPAL	8 124	8 054	7 949	7 755	7 314
EPA	4 099	3 604	3 793	3 387	2 959
Nordair	3 536	3 751	3 796	3 827	3 553
PWA	5 550	5 492	5 335	4 828	3 841
Quebecair	4 789	5 986	4 047	3 504	2 652
Wardair	10 563	10 539	10 981	10 847	9 243
Total Level I	6 929	6 801	6 549	6 332	5 641

Table 1.12

LABOUR COST PER HOUR FLOWN

(Dollars)

<u>Carriers</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	2 364	2 347	2 254	2 108	1 846
CPAL	2 205	2 321	2 377	2 269	2 151
EPA	1 110	1 045	1 095	935	843
Nordair	956	1 117	1 240	1 082	972
PWA	1 972	2 132	2 028	2 000	1 439
Quebecair	1 323	1 868	1 153	1 027	776
Wardair	1 526	1 614	1 777	1 756	1 513
Total Level I	2 054	2 134	2 095	1 975	1 699

Table 1.13

FUEL AND OIL COST PER HOUR FLOWN

(Dollars)

<u>Carriers</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Air Canada	1 722	1 652	1 673	1 730	1 604
CPAL	2 030	1 971	2 093	2 118	2 074
EPA	922	821	864	857	755
Nordair	1 071	1 124	1 120	1 148	1 086
PWA	1 201	1 140	1 168	1 083	814
Quebecair	1 294	1 394	761	686	645
Wardair	3 532	3 569	3 683	4 018	3 631
Total Level I	1 707	1 667	1 695	1 731	1 567

average annual increase of 2.2% marginally higher than the average for Level I carriers. EPA, Nordair and Quebecair had the highest average fuel and oil increases.

A comparison of the average annual change for Level I carriers' operating revenues and operating expenses per hour flown reveals similar increases as were observed earlier for the operating revenues and operating expenses. Again, the same two carriers, CPAL and Wardair, were the only two to have kept their average annual increases on the expense side lower than on the revenue side.

An examination of the average annual measures for fuel and oil costs per hour flown reveals a wide divergence in average annual changes between carriers. Three carriers, Wardair, CPAL and Nordair have managed, from 1981 to 1985, an average annual reduction in their fuel and oil costs per hour flown. Air Canada is another carrier which managed to keep fuel costs below the Level I carrier average, while EPA, PWA and Quebecair all exceeded the Level I carrier average annual change.

SUMMARY OF SCHEDULED CARRIER ACTIVITY

The principal changes occurring in the level of service at Canadian communities in the third quarter of 1986 are shown in Table 1.14 and summarized below. Comparisons are made with the same quarter of 1985.

The analysis is performed on the basis of scheduled departures listed in the Official Airline Guide. The guide covers scheduled services only of carriers reporting their activities in the guide. For Canada, the coverage includes however most operations. This analysis excludes charter and all-cargo flights. Hence, it is possible that a service being reported as a new route may have already been served by charter or by some other schedule not listed in the Official Airline Guide.

Figure 1.1 illustrates service and competition levels of domestic services at the large, medium and small hubs. The area of each circle is proportional to the domestic seating capacity and each circle is subdivided according to the capacity shares of each carrier capturing more than 10% of the market. All remaining carriers are aggregated as "other". A carrier's share includes operations performed by another carrier but under a common designator code.

Service Changes

Significant growth of scheduled operations continued as capacity increased by 7% over the third quarter of 1985. Most of the growth has been provided by non-jet operations which have increased by 36% during the year while jet operations have posted a more modest 2% gain.

The effects of Expo '86 were clearly felt at Vancouver which registered a 29% increase in capacity. However, seating capacity at other hubs showed mixed results. Capacity increased by 9% at Toronto, 6% at Winnipeg and 2% at Montreal while capacity decreased by 1% at Calgary, 3% at Edmonton, 5% at Ottawa and 6% at Halifax. The increase in Toronto's capacity is attributable to Wardair's new scheduled services while expansion of Pacific Western's services account for much of Winnipeg's growth. The capacity declines at Ottawa and Halifax represent corrections to past expansion. Prevailing regional economic conditions are behind the decline at Calgary and Edmonton, although the percentage decreases are less severe as the ones observed in previous quarters.

Several noteworthy events occurred in the third quarter of 1986. The Quebec government announced the sale of Quebecair to Nordair Métro. However the sale itself has not yet resulted in major service changes, although Quebecair had already begun to rationalize its network. Wardair had converted some of its charter services to scheduled operations. Several new carriers inaugurated regional services in the third quarter. Air Bras d'Or and Air Nova began service in the Atlantic Provinces; Air North, Keewatin Air and Northland Air Manitoba introduced new services in the North and Waglisla Air inaugurated operations in British Columbia.

Table 1.14

SUMMARY OF SCHEDULED CARRIER ACTIVITY
FOR WEEK OF AUGUST 15-21, 1985 AND 1986

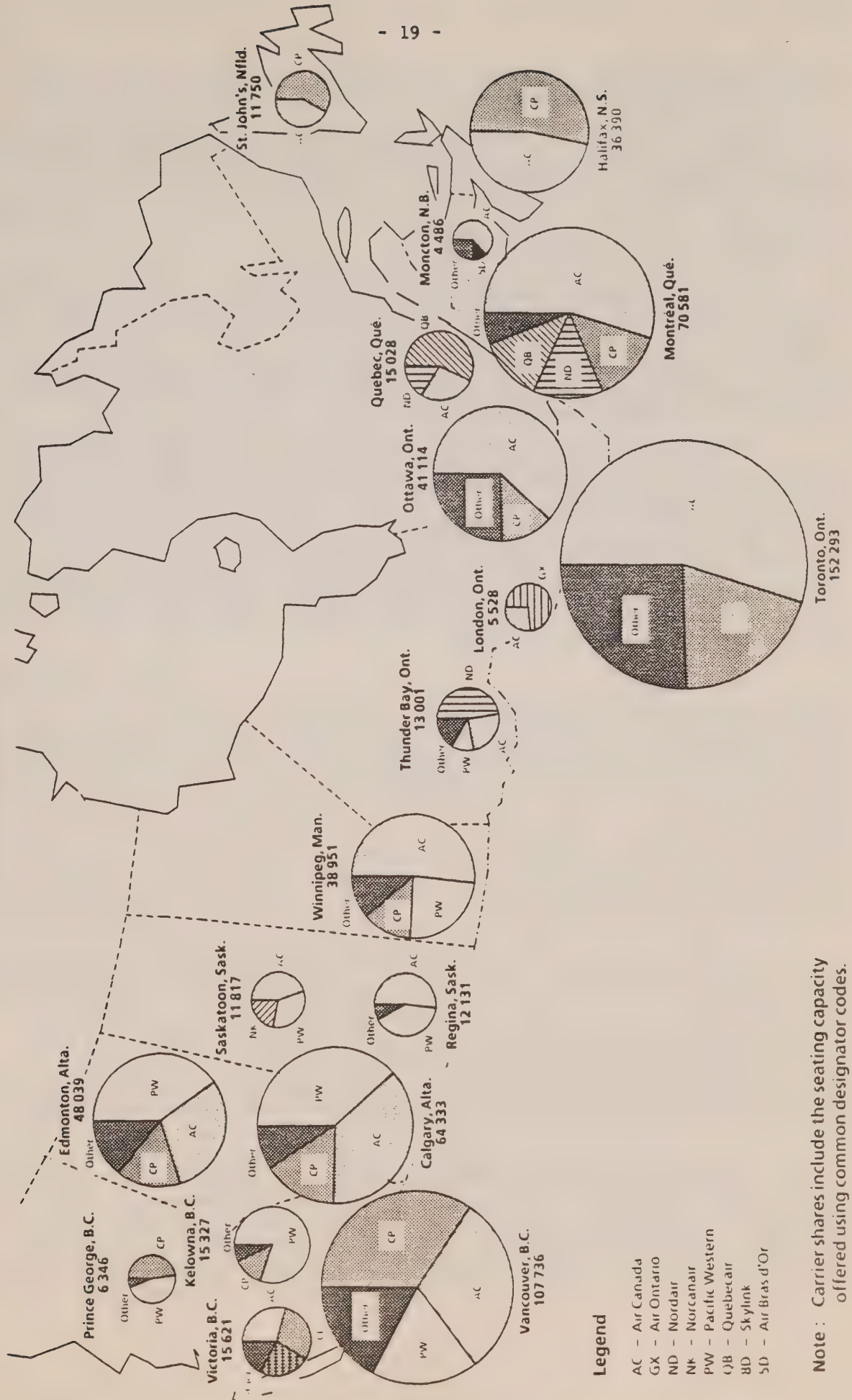
<u>Departure and Seats</u>	<u>Year</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
		<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	1985	4 999	632 979	3 950	113 089	8 949	746 068
	1986	5 076	633 942	6 085	157 675	11 161	791 517
Northern Domestic Sector	1985	522	54 235	1 175	28 761	1 697	82 996
	1986	561	57 648	1 743	39 687	2 304	97 335
Transborder Sector	1985	1 362	178 812	340	8 809	1 702	187 621
	1986	1 361	183 016	412	7 265	1 773	190 281
International Sector	1985	388	121 961	8	320	396	122 281
	1986	446	137 845	9	360	455	138 205
All Sectors	1985	7 271	987 987	5 473	150 979	12 744	1 138 966
	1986	7 444	1 012 351	8 249	204 987	15 693	1 217 338

<u>Percentage Change in Departures and Seats</u>	<u>Jet</u>		<u>Non-Jet</u>		<u>Total</u>	
	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>	<u>Dep.</u>	<u>Seats</u>
Southern Domestic Sector	+1.5	+0.1	+54.1	+39.4	+24.7	+6.1
Northern Domestic Sector	+7.5	+6.3	+48.3	+38.0	+35.8	+17.3
Transborder Sector	-0.1	+2.4	+21.2	-17.5	+4.2	+1.4
International Sector	+14.9	+13.0	+12.5	+12.5	+14.9	+13.0
All Sectors	+2.4	+2.5	+50.7	+35.8	+23.1	+6.9

Figure 1.1

SCHEDULED CARRIER ACTIVITY AT MAJOR SITES: DOMESTIC SERVICES ONLY

Seats Offered during the Week of August 15-21, 1986



Legend

- AC - Air Canada
- GX - Air Ontario
- ND - Nordair
- NK - Norcanair
- PW - Pacific Western
- QB - Quebecair
- BD - Skylark
- 5D - Air Bras d'Or

Note : Carrier shares include the seating capacity offered using common designator codes.

Southern Domestic Sector

Seating capacity in the southern domestic sector grew by 6% over 1985 levels but a third of this gain was due to the conversion of Wardair's charter operations to scheduled service. Wardair's converted services involve routes from Toronto to Calgary, Edmonton and Vancouver and use a mix of wide-body equipment. Further expansion is planned once Wardair obtains its recently ordered Airbus 300 aircraft.

Pacific Western Airlines (PWA) was also active in the southern domestic sector. PWA added Ottawa to its network by inaugurating two daily flights between the national capital and Winnipeg. One of the two flights stops at Toronto. The carrier also inaugurated non-stop service between Edmonton and Winnipeg, and increased frequency significantly on its Calgary-Vancouver and Edmonton-Vancouver routes.

Both Air Canada and Canadian Pacific Air Lines (CPAL) increased their frequency to Vancouver in response to Expo '86 but both carriers were also active in the Atlantic Provinces. CPAL introduced a new daily non-stop flights between St. John's and Toronto while Air Canada expanded its operations at Charlottetown by adding a new route to Halifax. Elsewhere, Quebecair replaced some of its former jet services with Convair turboprop equipment. Most affected were services to Bagotville which lost all of its jet services. However, frequency in most regional markets is being maintained with turboprop equipment.

As indicated earlier, two new carriers inaugurated scheduled air services within the Atlantic Provinces. Air Bras d'Or began service to twelve communities in New Brunswick, Nova Scotia and Prince Edward Island with DeHavilland Canada Twin Otter equipment. The schedule includes first time service to Digby and Port Hawkesbury, N.S. and restoration of scheduled air service to St. Léonard, N.B. Air Nova's operations with DeHavilland Canada DHC-8 equipment are designed to provide connecting service to Air Canada's departures at Halifax and St. John's. The carrier inaugurated its operations with services to Deer Lake and Sydney with further expansion planned with the delivery of new equipment. Air Nova's principal competition will be Air Atlantic which has a joint marketing agreement with CPAL.

Changes to Québec's regional services were closely associated with the re-organization prior to its sale of Quebecair's network. Both Nordair Métro and Propair introduced daily Québec-Rimouski service. Propair also restored non-stop service from Québec to Rouyn/Noranda and Val d'Or but discontinued service to Amos and Sherbrooke. Propair also began supplementing Quebecair's own services on many routes during off-peak periods. Voyageur Airways replaced First Air's twice weekly service from Ottawa to Rouyn and Val d'Or.

Inter City Airways introduced new service from Oshawa to Montreal and Ottawa. Both routes compete with recently introduced services by Skycraft Air Transport. Inter City Airways has also entered into a joint marketing agreement with Wardair. New services are planned to feed traffic to Wardair at Toronto. Austin Airways expanded into Southern Ontario with the acquisition of Torontair. The acquisition affects service from Toronto

to Elliot Lake, Kingston and Trenton. Austin Airways also began a new Marathon-Sault Ste. Marie service. Air Ontario also added Sault Ste. Marie to its network by introducing two daily flights to Toronto. Finally, Voyageur Airways increased its schedule between Ottawa and Sudbury by adding a daily non-stop flight. Former Voyageur Airways' service involved a stop at North Bay and the new non-stop flight will compete directly with Nordair's jet service.

Not much change was observed in the Prairie Provinces air services. However, Norcanair discontinued services to North Battleford, Sask. and Time Air stopped operations at Bonnyville, Alta. No other scheduled carriers serve either community.

Regional carriers were again very active in British Columbia. A new carrier, Waglisha Air, introduced twice daily service between Vancouver and Bella Bella with a stop at Alert Bay. A connecting service to Bella Coola is provided at Bella Bella on Fridays. Skylink Airlines introduced non-stop service from Vancouver to both Bella Bella and Alert Bay. The carrier also transferred its Nanaimo-Vancouver service from Boundary Bay to Vancouver International Airport. All services use Embraer Bandeirante equipment. Burrard Air also expanded its operations significantly with new services from Vancouver to Qualicum, Courtenay, Merritt and Salmon Arm. This represents the first scheduled service to Courtenay and Merritt although Courtenay had historically been served through nearby Comox. At the same time, Burrard Air discontinued service to Gillies Bay.

Northern Domestic Sector

Seating capacity in the Northern Domestic Sector increased by 17% over the third quarter of 1985. Much of this increase was artificial since 1986 data include some services that were operated in 1985 on a non-scheduled basis. Seating capacity had increased by 4% when such services are not considered.

Pacific Western returned to Whitehorse by adding a daily Vancouver-Prince George-Whitehorse service. The carrier had discontinued a twice weekly Edmonton-Whitehorse service last year. The new service will compete against existing CPAL services at Whitehorse. Most other airlines have basically maintained their services pattern in the North. The only exception was Austin Airways which introduced a new twice-weekly Moosonee-La Grande-Kuujuarapik service with Cessna equipment.

Four new carriers inaugurated service in the Northern Domestic Sector. Northland Air Manitoba was the largest new entrant when it began service from Winnipeg to seven communities in Northern Manitoba. The new services, which also include routes to Sandy Lake, Ont., are provided with a mix of Hawker Siddeley 748 and Douglas DC-3 equipment. Most of the communities in Northern Manitoba are also served by Calm Air and Perimeter Airlines. Keewatin Air began local services joining Baker Lake, Gjoa Haven, Pelly Bay, Spence Bay and Rankin Inlet. The new services use DeHavilland Canada Twin Otter equipment. Air North restored services between Watson Lake and Whitehorse with three weekly Piper Navajo roundtrips. Air Nova, in association with Air Canada, introduced a Goose Bay-St. John's non-stop

service with DeHavilland Canada Dash-8 equipment. The new route will compete with direct CPAL jet service. Trans-Provincial Airlines discontinued service between Prince Rupert and Stewart. No other scheduled carrier serves Stewart.

Transborder Sector

Scheduled capacity in the Transborder sector remained stable with a 1% gain in capacity. This figure does not reflect the cessation of service by Frontier Airlines on three routes: Vancouver-Spokane, Saskatoon/Regina-Minot and Winnipeg-Bismark. Western Airlines announced that it will resume air service between Vancouver and Spokane.

Skycraft Air Transport began a new service linking its Oshawa base with Detroit's City Airport. The route is served twice daily with Cessna equipment. Air North restored transborder service at Whitehorse with new routes to Fairbanks and Juneau. Both routes are served with Douglas DC-3 equipment. TEMSCO inaugurated a twice weekly floatplane service between Ketchikan and Prince Rupert. The new service competes with an existing Trans-Provincial Airlines service.

Horizon Air discontinued its Calgary-Spokane service but United Airlines has announced that it will resume jet service on the route. Quebecair stopped its remaining services between Montreal and Boston. Delta Air Lines continued frequent service on the route. City Express ceased operations between Pittsburgh and Hamilton. No other transborder service is offered at Hamilton.

International Sector

The International sector registered the most impressive gains, posting a 13% gain over 1985 capacity levels. However, most of the increase is due to the conversion of Wardair's charter services to the United Kingdom. Seating capacity has increased only by 3% when it is adjusted for Wardair's new flights from Calgary, Edmonton, Ottawa, Toronto and Vancouver to London. Wardair's flights serve London's Gatwick airport.

Canada's new bilateral agreement with Chile permitted LAN Chile to establish a new service between Montreal and Santiago. The two weekly Boeing 767 flights stop at New York and Miami. CPAL is still operating its twice-weekly Toronto-Santiago service. A recently concluded bilateral agreement with Israel has also permitted El Al to extend its Tel-Aviv-Montreal service to Toronto.

In the last issue, it was erroneously reported that Czechoslovak Airlines (CSA) had inaugurated service to Toronto. Bilateral negotiations are still under way between Canada and Czechoslovakia and have yet to be concluded. However, CSA does provide a weekly Montreal-Prague service under the terms of the existing bilateral agreement.

DOMESTIC AND TRANSBORDER AIR FARE INDICES

This section presents a brief discussion of air fares indices both in the domestic and transborder markets. These indices are summarized in Table 1.15 and also illustrated in Figures 1.2 and 1.3.

With respect to the domestic fare indices both the economy and discount fares continued to increase at a faster rate than the CPI in the second quarter of 1986.

In contrast to fares in the domestic market, both transborder fare indices have risen much more slowly than the CPI over the past three years. The transborder economy fare index increased only slightly from 101.1 to 102.1 over the four quarters of 1986 while the discount fare index stood at 81.5 in the fourth quarter of 1986, which represented its lowest level since the fourth quarter of 1983. The regular pattern shown by transborder discount fares in 1983 and 1984 (up in the first and third quarters, down in the second and fourth quarters) is not exhibited in 1985 because the traditionally low fares in the second quarter were not available during the week which has been selected for analysis.

Table 1.15

PRICE INDICES FOR DOMESTIC AND TRANSBORDER
SCHEDULED AIR SERVICES
(1st quarter of 1983 = 100)

	Domestic		Transborder		
	<u>Economy Fare</u>	<u>Discount Fare</u>	<u>Economy Fare</u>	<u>Discount Fare</u>	<u>CPI</u>
<u>1983</u>					
Q1	100.0	100.0	100.0	100.0	100.0
Q2	101.6	114.7	100.0	79.1	101.4
Q3	106.7	119.8	100.0	103.6	103.0
Q4	106.7	108.4	100.0	72.2	103.9
<u>1984</u>					
Q1	106.8	108.5	100.0	104.1	105.2
Q2	106.8	126.0	100.3	100.6	106.1
Q3	106.8	126.1	100.3	116.0	107.1
Q4	111.2	118.3	101.1	84.3	107.8
<u>1985</u>					
Q1	111.9	114.5	101.1	99.1	109.1
Q2	114.5	117.0	101.1	111.7	110.3
Q3	114.4	136.8	102.1	110.7	110.3
Q4	116.9	119.7	102.1	81.5	112.3
<u>1986</u>					
Q1	116.9	119.7			113.7
Q2	120.4	123.5			114.6

FIGURE 1.2

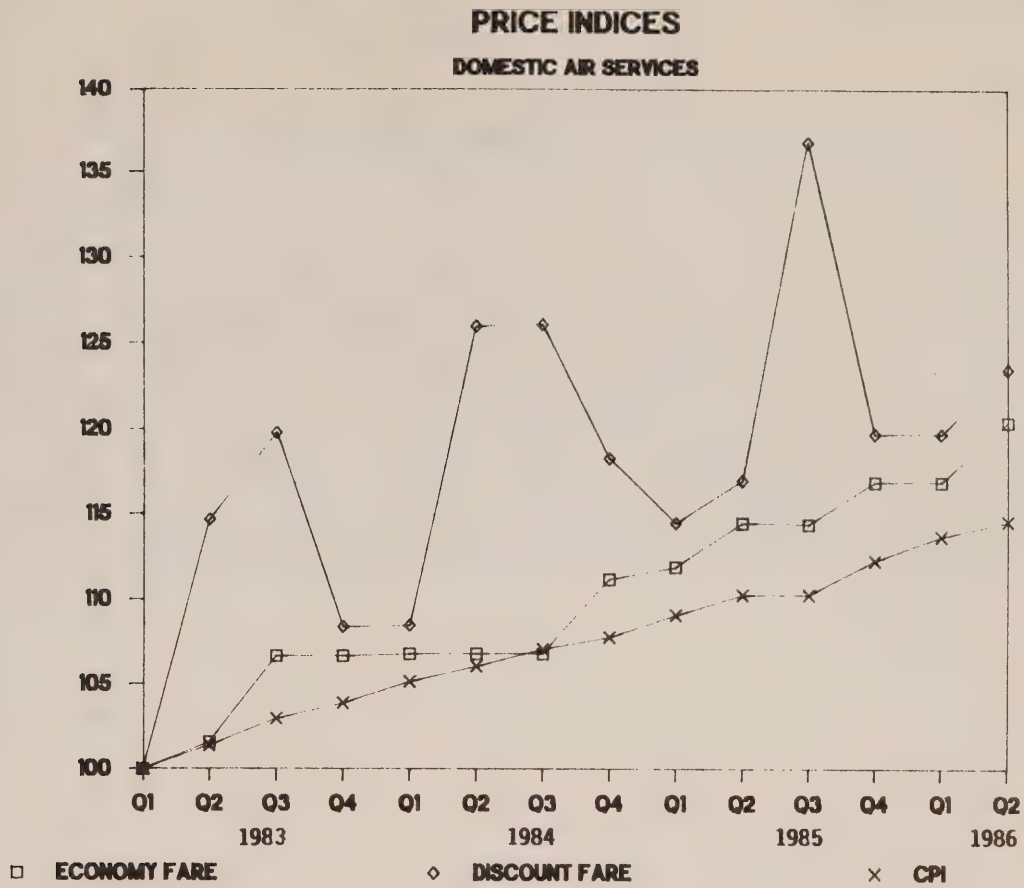
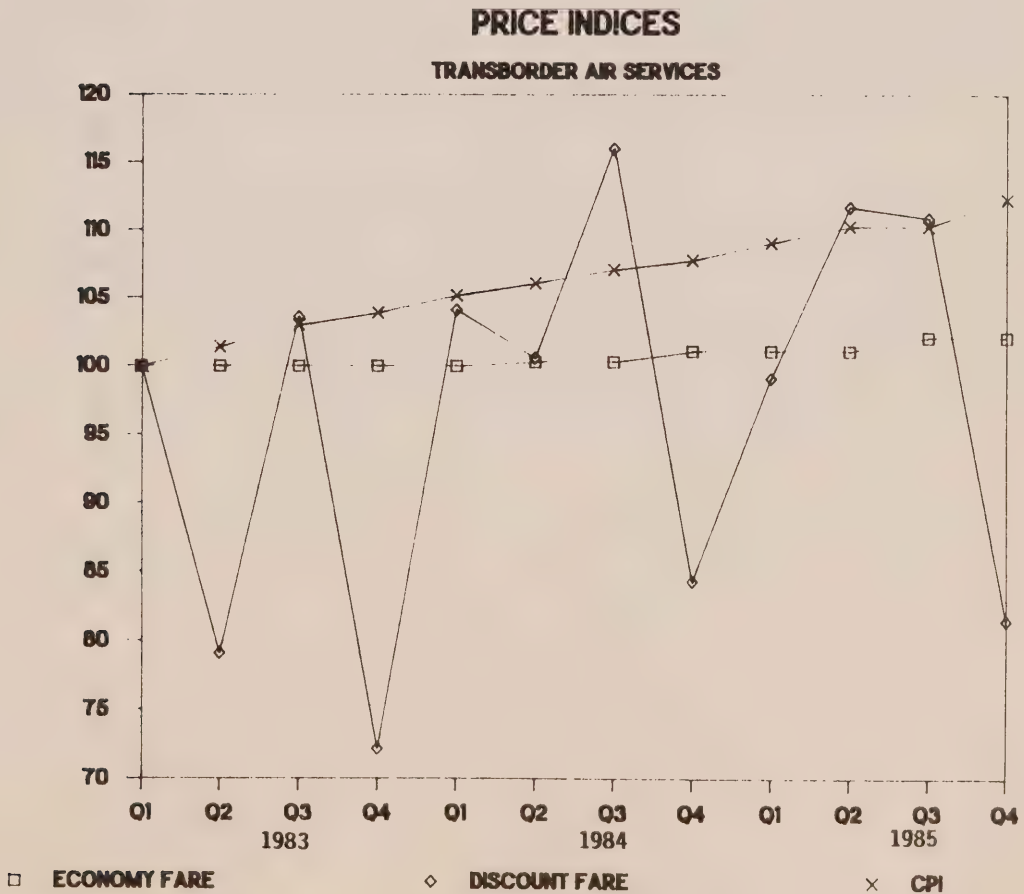


FIGURE 1.3



Part II

MARKET ANALYSIS

This part of the report presents a discussion of scheduled air services and prices in the Prairie and Atlantic markets. With respect to the Prairie market, the discussion covers scheduled services within the Prairies and between major centres in this region and selected points outside. The discussion of air fares provides a brief look at the movement of prices in the Prairie market over the past three years as well as an examination of various air fares on comparable Canadian and U.S. routes during the second quarter of 1986. As far as the Atlantic market is concerned, the discussion covers scheduled services in this region as well as the movement of prices in this market from 1983 to 1986 and an examination of air fares on comparable Canadian and U.S. routes.

SCHEDULED AIR SERVICES IN THE PRAIRIE REGION

This section provides a description of scheduled air services offered in the Prairie Region in the third quarter of 1986. The analysis is carried out for the week of August 15-21. In order to identify recent changes in air services, a comparison is also made with services offered during the same week in 1985.

Figures 2.1 and 2.2 provide a schematic representation of scheduled air services operated in the Prairie Region during the week of August 15-21 in 1985 and 1986 respectively. Before proceeding to a discussion of the services illustrated in these figures, the following cautionary points should be borne in mind. First of all, the figures do not provide any indication either with regard to the frequency of service between points or to the number of carriers serving them. Thus, a flight provided once a week is shown in the same manner as a service with a frequency of three flights per day. Similarly, a service provided by a single carrier is depicted the same way as services provided by several carriers. Furthermore, all services between two cities, except non-stop ones, may require a plane change or even a change in carrier, and this is also not shown in these figures. It should be noted that the figures show not only those routes within the Prairie Provinces but also those to adjacent regions. One way services are indicated by arrows, all other services are provided in both directions.

Scheduled air service in the Prairie Region, because of a population which is highly dispersed and because of a topography which lends itself to surface transport alternatives is, for the most part, limited to connections between major urban centres. In the third quarter of 1986, some 12 communities in the region received scheduled air services, five of which are situated in the Province of Alberta, four in the Province of Saskatchewan and three in the Province of Manitoba¹. This total is down significantly (20%) from the previous year as three communities reported a loss of scheduled service in 1986.

Despite the downturn in air carrier activity within the region as a whole, most major city pair markets are still benefitting from highly competitive services. To illustrate, Table 2.1 lists the major centers of the Prairie region (along with Vancouver and Toronto) and the carriers serving various city pairs with scheduled non-stop flights. The reader should be cautioned that Level II and Level III carriers may be found on some short-haul routes such as Calgary-Edmonton. The table does indicate however that several of the region's routes are served by more than one carrier.

Table 2.2 provides a listing of the active carriers in 1985 and 1986, identifies the type of equipment operated by each of them and provides the estimated seating capacity for each type of aircraft. A total of ten carriers provided scheduled air service in the Prairie region during the third quarter of 1986. Among those carriers which provided scheduled services were five Level I operators, three Level II and two Level III carriers. Six of the ten carriers accounted for all of the intra-regional traffic, and although no carriers entered or exited this intra-regional market during this period, an examination of the carriers' market shares

Figure 2.1
SCHEDULED AIR SERVICES IN THE PRAIRIE REGION
For the Week of August 15-21, 1985

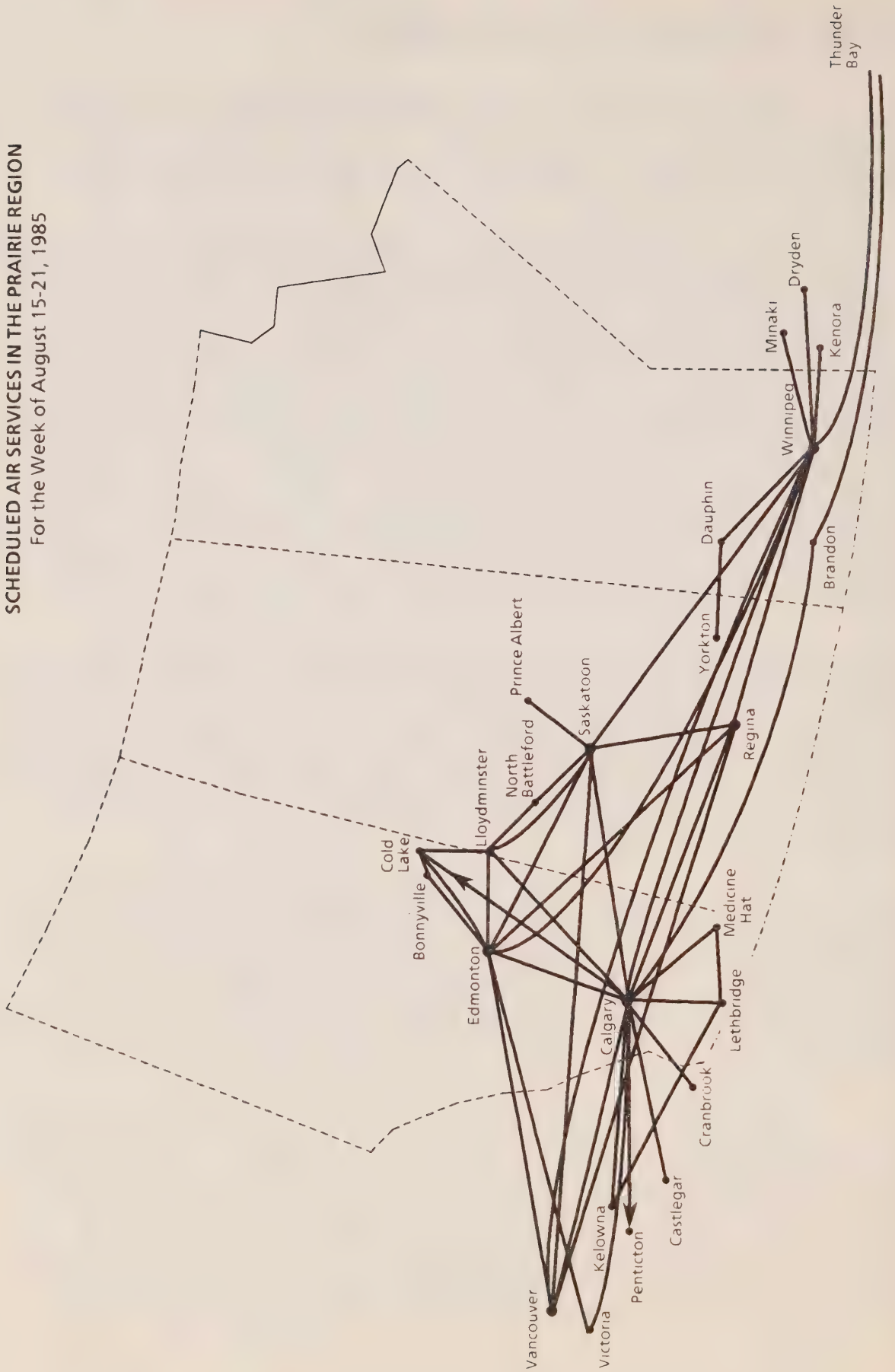


Figure 2.2
SCHEDULED AIR SERVICES IN THE PRAIRIE REGION
For the Week of August 15-21, 1986

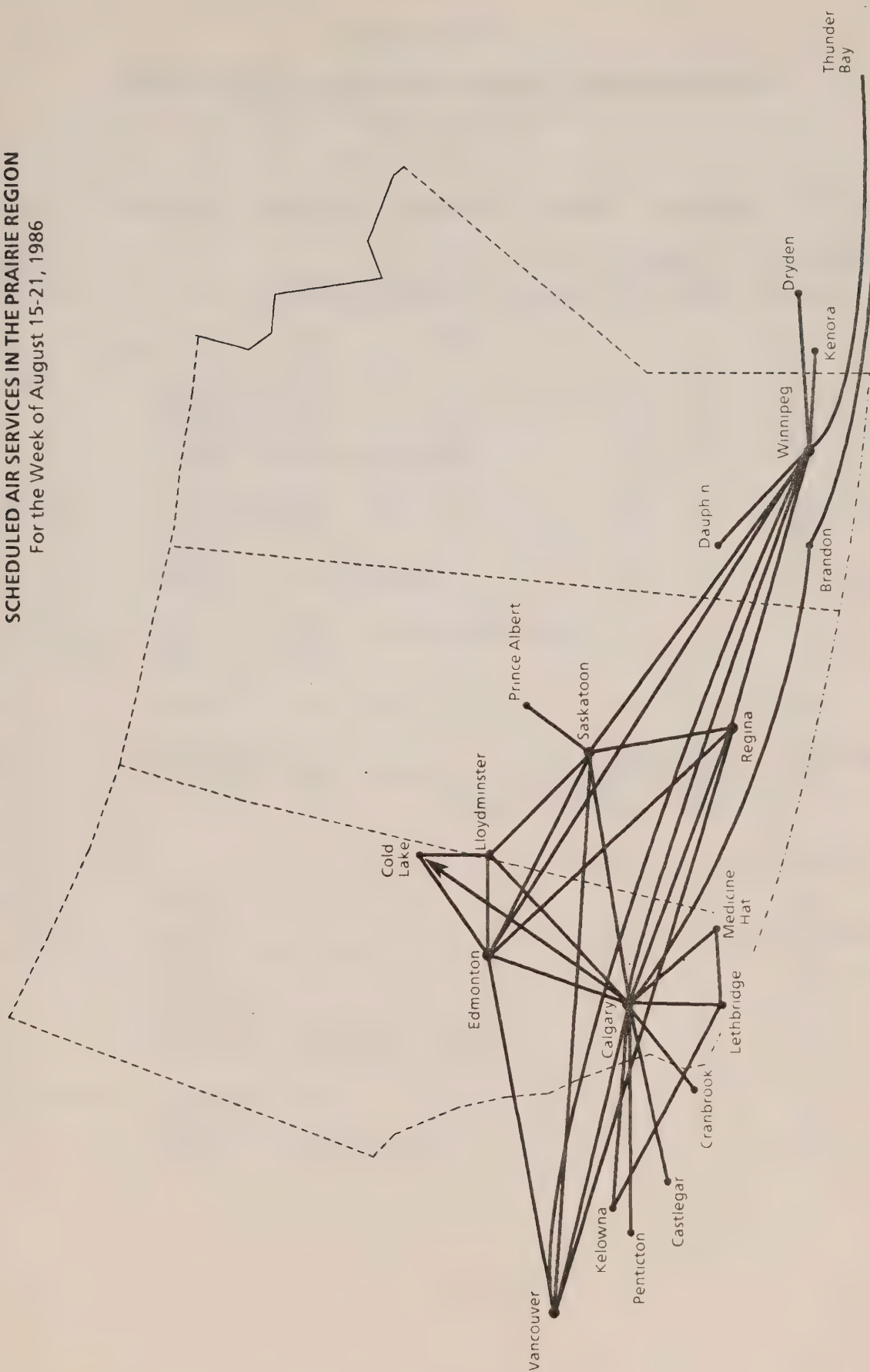


Table 2.1

CANADIAN CARRIERS SERVING* MAJOR HUBS - PRAIRIE REGION

August 1986

<u>From:</u>	<u>To:</u>		<u>Edmonton</u>	<u>Regina</u>	<u>Saskatoon</u>	<u>Winnipeg</u>	<u>Vancouver</u>	<u>Toronto</u>	
Calgary	CP	KI	AC	AC			AC	AC	WD
	PW		PW	PW	AC		CP	CP	
Edmonton			AC	AC	AC	AC	AC	AC	WD
					PW	PW	CP	CP	
Regina					PW	AC	AC	AC	
					NK	PW			
Saskatoon						AC	AC	AC	
						PW			
Winnipeg							AC	AC	PW
							CP	CP	

Legend : AC - Air Canada

CP - Canadian Pacific Air Lines

PW - Pacific Western Airlines

KI - Time Air Ltd.

NK - Norcanair

WD - Wardair

* Offering regularly scheduled non-stop service.

Source: Official Airline Guide.

Table 2.2

FLEET OF CANADIAN CARRIERS OPERATING SCHEDULED
SERVICES IN THE PRAIRIE REGION

1985 and 1986

<u>Canadian Carrier</u>	<u>Aircraft Type</u>	<u>Used 1985</u>	<u>In 1986</u>	<u>Estimated Seating Capacity</u>
<u>Level I</u>				
Air Canada	Lockheed L-1011	x	x	288
	Boeing 727-200	x	x	132
	Boeing 767	x	x	201
	McDonnell Douglas DC-9-30	x	x	102
Canadian Pacific Air Lines	Boeing 737-300	x	x	138
	Boeing 737	x	x	109
	Boeing 747		x	452
	McDonnell Douglas DC-10	x	x	273
Pacific Western Airlines Ltd.	Boeing 737-200 Mixed Passgr/Freight		x	56
	Boeing 737-200	x	x	119
Nordair	Boeing 737 (All Series)	x	x	109
Wardair	Boeing 747		x	452
	McDonnell Douglas DC-10	x	x	273
<u>Level II</u>				
Air Ontario	Convair	x	x	56
Norcanair	Embraer Banderainte	x	x	19
	Convair	x		56
	Beechcraft	x	x	15
	Fokker F28 Fellowship		x	85
	Fokker Fairchild F27 Friendship	x	x	42
Time Air (1982) Ltd.	Beechcraft C99	x	x	15
	Convair	x	x	56
	DeHavilland DHC-7 Dash-7	x	x	50

Table 2.2 (Cont'd)

Canadian Carrier	Aircraft Type	Used In		Estimated Seating Capacity
		1985	1986	
<u>Level III</u>				
norOntair	DeHavilland DHC-6 Twin Otter	x		20
Bearskin Lake Air Service Ltd.	Beechcraft C99	x	x	15
Perimeter Airlines (Inland) Ltd.	Beechcraft	x	x	15

(Table 2.3) reveals that there has been a shift in capacity from Air Canada, CPAL and Time Air Ltd. to PWA.

Table 2.3 summarizes the basic characteristics of the Prairie regional market. Contrary to the trends occurring in short-haul markets elsewhere in Canada, the Prairie region has witnessed a marked decline in the level of scheduled air carrier activity in 1986 from that in 1985. This can be explained, in part, in that it coincided with the downturn in the economy in Alberta. The number of scheduled departures per week for the region, as of August 1986, was down by more than 10% from the August 1985 level, while seating capacity dropped by 6.7% over the same period. As opposed to the case in other regions in Canada, the expected growth of non-jet operators in supplying additional capacity has not materialized in the Prairie region. This lack of growth can partly be explained in that locals such as Time Air and Norcanair were already well-established and that local air transport has a great deal of competition from the surface modes. In fact, it appears that the non-jet operators have been the most adversely affected in this downward trend while a larger carrier, Pacific Western Airlines, appears to have strengthened its market position. The decline in carrier activity was also reflected in the average seats per departure which increased from 83 seats in 1985 to 87 seats in 1986. Similarly, the average stage length in the Prairie region rose from 418 kms. in 1985 to 451 kms. in 1986, again indicative of the trend within the region toward jet aircraft.

The region's largest carrier in terms of market share is Pacific Western Airlines which, in 1986, provided 52.3% of the total seating capacity. Its position is even more dominant when one considers that it owns 46% of Time Air Ltd., the largest local carrier operating within the region. Despite the decline in the overall level of scheduled air carrier activity within the region over the past year, PWA's market share in terms of departures, seating capacity and seat-kilometers flown all rose by 3 to 4% (see Table 2.3)². For the most part, PWA served the same routes in 1986 as it did in 1985. The airline did, however, discontinue its daily service between Calgary and Winnipeg in 1986, leaving Air Canada as the lone carrier providing non-stop scheduled service between that city pair (PWA however, continues its one-stop service between these two centres via Regina). At the same time, PWA introduced three times a day service (except on weekends when there are two flights per day) between Edmonton and Vancouver, a route in which it competes with CPAL and Air Canada. The Calgary based carrier, has followed through with its commitment of extending its route network into Eastern Canada. The carrier now offers scheduled non-stop daily service to Ottawa and twice daily service to Toronto from Winnipeg, and has recently announced its intention to introduce other short and medium haul routes in Ontario in the near future. In addition, PWA which uses Boeing 737s on all its regional routes, has also increased the number of flights per week on many of its higher density city pair routings in Western Canada, examples of which include: Calgary-Regina (which rose from eight flights per week in August 1985 to 13 flights per week in August 1986), Regina-Winnipeg (from 12 to 20 flights per week), Saskatoon-Winnipeg (from eight to 13 flights) and Calgary-Vancouver (from 23 to 32 flights). One city pair served by PWA which witnessed a drop in the scheduled non-stop service during the year was Calgary-Saskatoon which went from 30 to 20 flights per week.

Table 2.3

SCHEDULED CARRIER ACTIVITY¹
WITHIN THE PRAIRIE REGION

<u>Regional Summary</u>	<u>1985</u>	<u>1986</u>	<u>% Change</u>
Carriers	6	6	--
Airports Served	16	13	-18.8%
City Pairs Served	28	23	-17.9%
Departures per Week	1 004	900	-10.4%
Seats per Week	83 607	78 012	-6.7%
Seat-Kms. per Week (x 1 000)	43 135	40 635	-5.8%
Average Seats per Departure	83.3	86.7	4.1%
Average Stage Length (Km.)	418.4	451.0	7.5%

<u>Carrier Shares</u>	<u>Departures</u>		<u>Seats</u>		<u>Seat-Kms.</u>	
	<u>1985</u>	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>	<u>1986</u>
Pacific Western Airlines	34.7%	38.2%	49.0%	52.3%	41.1%	45.5%
Air Canada	32.5%	22.7%	30.1%	28.7%	46.8%	46.5%
CPAL	1.3%	1.2%	3.2%	1.5%	4.5%	0.7%
Time Air Ltd.	24.7%	23.3%	12.3%	11.9%	5.4%	5.0%
Norcanair	13.8%	12.3%	5.1%	5.3%	2.0%	2.2%
Perimeter Airlines (Inland) Ltd.	3.0%	2.2%	0.3%	0.2%	0.1%	0.1%

¹ Scheduled carrier data are for the weeks of August 15-21, 1985 and 1986.

Air Canada serves most of the regions' major city pairs and provides most of the competing service to PWA. It is evident from Table 2.1 that the two jet carriers compete directly in at least seven major city pair markets in Western Canada (five of which are within the Prairie Region) and that Air Canada is the lone carrier offering direct non-stop scheduled service in another five city pair markets (three of which are within the Prairie Region). Air Canada's regional routes fulfill the function of carrying local traffic and feeding passengers to the carrier's national and international route network. On its regional routes, Air Canada has basically stood pat offering the same routes and similar service levels in 1986 as it did in 1985. As a result, the carrier's regional market share in 1986 remained virtually unchanged from the previous year, although its market share in terms of seating capacity dropped by approximately 1.4%. There were, however, a few route changes worth noting. After a brief entry, which lasted about a year, into the highly competitive Calgary-Edmonton market in 1986, Air Canada withdrew its services from that city pair market thereby reducing the number of carriers offering non-stop scheduled service between those cities to three (PWA continues to be the dominant carrier in this city pair market offering over 90 flights per week between the two centers).

In addition, Air Canada, in 1986, dropped its non-stop scheduled services to Victoria from Calgary and from Edmonton. At the same time, the airline introduced daily service between Winnipeg and Thunder Bay, a market in which they compete with Nordair and Air Ontario. The McDonnell Douglas DC-9 is used on most of Air Canada's routes within the Prairie region, although the carrier also makes extensive use of its Boeing 727's.

Although it would appear that Canadian Pacific Airlines plays a relatively minor role in terms of regional traffic accounting for only 1.2% of total departures in 1986, the carrier draws heavily on the Prairie Region in feeding traffic into its domestic (particularly Vancouver and Toronto) as well as its international network. One area in which CPAL is very much in evidence, however, is in the highly competitive Edmonton-Calgary-Vancouver triangle. The carrier offers daily service (except Saturdays) between Calgary and Edmonton using Boeing 737's.

With regard to the local carriers, Time Air Ltd. which, in 1985, had entered the Edmonton-Lloydminster-Saskatoon market in competition with the existing local, Norcanair, has recently withdrawn from that market. Moreover, three communities which had been served by local carriers in 1985 are without scheduled air service in 1986. Although the combined market share of scheduled departures for these locals dropped from 41.5% in 1985 to 37.9% in 1986, their share in terms of capacity and seat-kilometers remained roughly the same during that period. The service provided by the region's three non-jet operators tends to complement that provided by the major carriers in that the locals help funnel traffic from smaller urban centers through to larger centers, some of which is forwarded to other Canadian or international destinations.

The three locals serve three distinct yet contiguous areas within the region. As of August 1986, there were no cases in which locals competed directly with each other on the same city pair market and, in fact, there

were only two markets (Calgary-Edmonton and Regina-Saskatoon) in which a local competed with jet operators.

Calgary-based Time Air Ltd., following its recent takeover of Southern Frontier Airlines of Calgary, has become the dominant local carrier in the Prairies with a route network which extends from Victoria, B.C. to Prince Albert, Saskatchewan. An affiliate of PWA which owns a 46% interest in it, Time Air concentrates largely on the short-haul lower density markets using primarily Convair and DeHavilland Dash 7's. As PWA holds a dominant position in terms of the region's higher density markets, Time Air holds a somewhat similar position in terms of the region's lower density markets. Although it offers service in the highly competitive Edmonton-Calgary market (18 flights/week), competing against jet carriers PWA (90 flights/week) and CPAL (6 flights/week) (Air Canada withdrew its service in 1986), Time Air is the lone carrier providing scheduled service in seven other city pair markets within the region. In addition, Time Air is the sole scheduled operator on several routes extending to British Columbia such as Lethbridge-Kelowna (daily service) and Calgary-Castlegar (daily service). In 1986, Time Air saw its share of the regional market drop slightly from the previous year as its departure and capacity share were down by respectively 1.4% and 0.4%. The moderate decline in 1986 is largely a result of the carrier discontinuing service on the Edmonton-Lloydminster-Saskatoon route.

A somewhat similar situation exists in Saskatchewan where a local carrier complements the service provided by the larger carriers. Based in Saskatoon, Norcanair provides non-stop scheduled services between its base and the provincial communities of Regina (three times daily), Prince Albert and Lloydminster (both twice daily except on weekends) using a wide range of aircraft including the Fokker F28 jet aircraft and the Embraer Bandeirante 110 turbo-prop. In the case of the latter two city-pair markets, Norcanair is the only carrier providing scheduled service following the withdrawal in 1986 of Time Air from the Saskatoon-Lloydminster market. In the Regina-Saskatoon market, however, the local carrier competes directly with PWA offering more than 3 flights per day using both jet and non-jet aircraft, compared to the PWA's daily service. In 1986, Norcanair discontinued its scheduled service to North Battleford. Largely as a result of this, its share of the regional market in terms of departures fell by 1.5% in 1986 from that in 1985, yet in terms of seat capacity its market share actually increased owing to its introduction of the larger Fokker jet aircraft on its routes.

The other local carrier providing scheduled service within the region is Perimeter Airlines (Inland) Ltd. which is based in Winnipeg. The carrier provides twice daily service (except on weekends) between its base and the community of Dauphin, Manitoba using Beechcraft turbo-prop equipment. Prior to 1986, this route had been extended to include Yorkton, Saskatchewan (daily service except on weekends); however, the carrier has since dropped this point citing low traffic volumes. As a result, the carrier's share of the total regional market dropped in 1986 from that in 1985 (see Table 2.3).

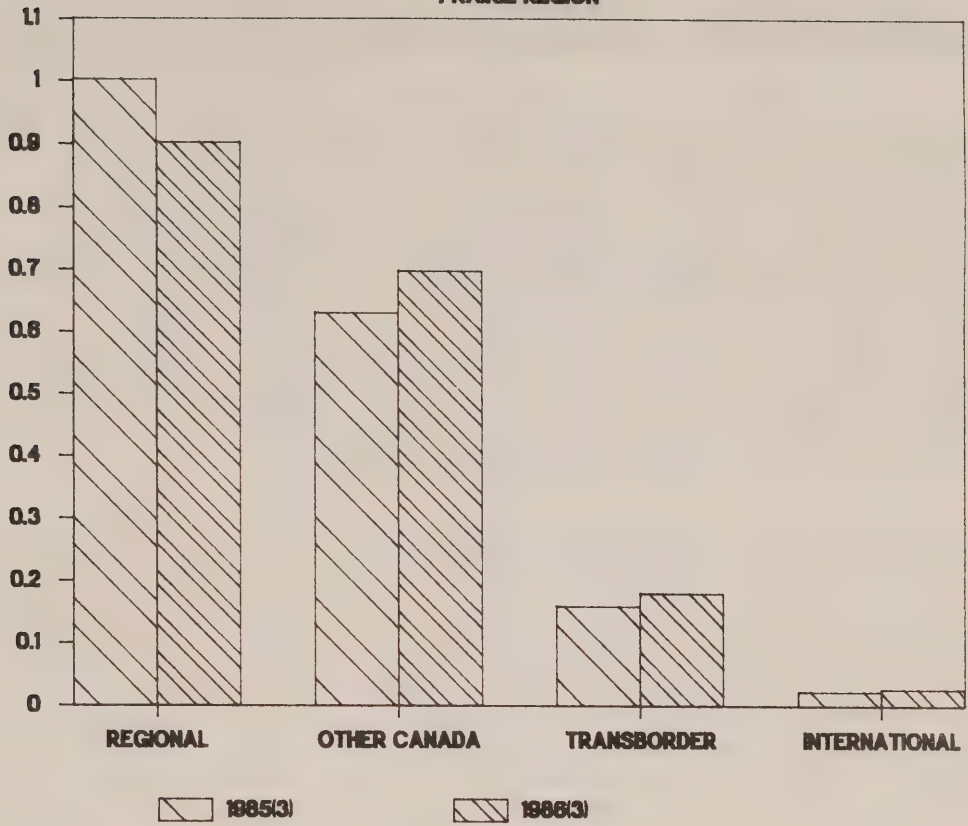
A discussion of the Prairie region's scheduled air services must also make mention of the links with the rest of Canada and the rest of the world. Figure 2.3 summarizes the level of scheduled activity of carriers

Figure 2.3

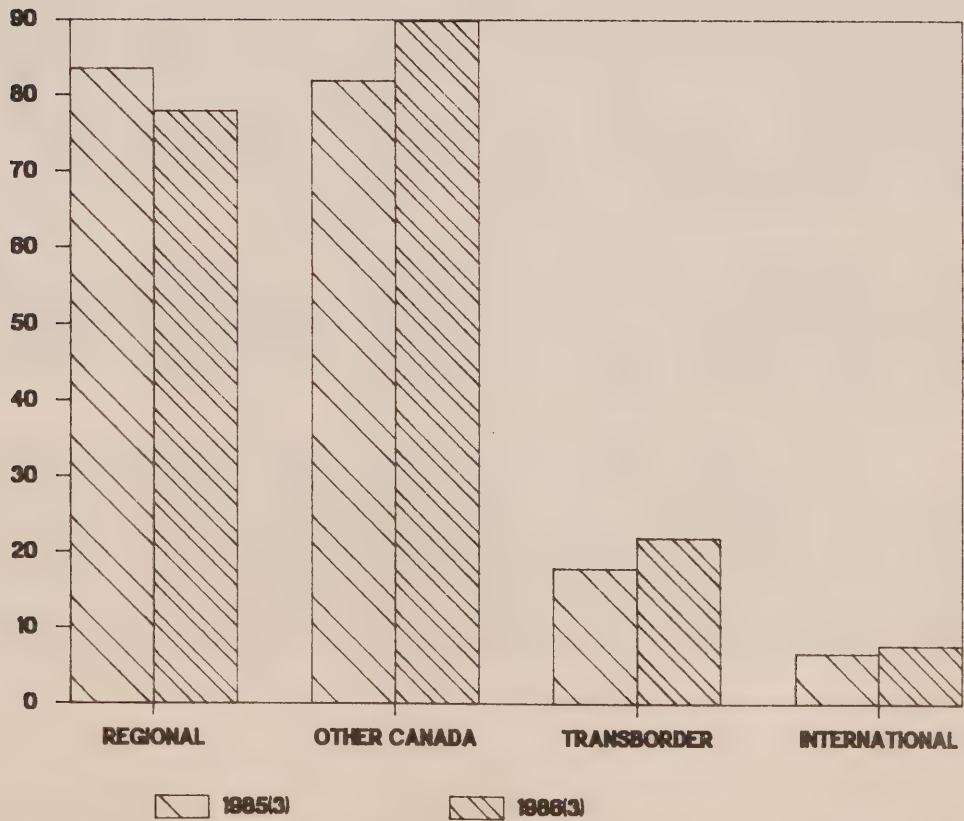
SCHEDULED AIR SERVICES

PRAIRIE REGION

DEPARTURES PER WEEK
(Thousands)



SEATS PER WEEK (Thousands)



offering services to points outside the Prairie Region, during the week of August 15-21, 1986 and compares it with those service levels of the same week of the previous year. It should be noted that inter-regional and international services will only be mentioned briefly here.

Not surprisingly, traffic to other Canadian destinations constituted a relatively high proportion of the overall level of activity, as traffic is forwarded both east and west along the national and international route networks. Vancouver and Toronto were the major destinations on inter-regional flights from the Prairie region, accounting for 40% and 36% of inter-regional departures respectively. Air Canada with its extensive domestic route network, continued to be the dominant carrier in terms of inter-regional activity accounting for 49% of those activities in 1986. Both CPAL and PWA with respectively a 25% and 9% share of the inter-regional air services increased the number of departures destined for other Canada points during the year. In the case of the latter carrier, it introduced for the first time in 1986 routes into Eastern Canada.

In the third quarter of 1986, six American carriers and two Canadian operators, namely Air Canada and Norcanair, provided scheduled service from points within the Prairie region to transborder destinations. As of August 1986, Air Canada provided daily scheduled service between Winnipeg and Chicago (seasonal service), and between Calgary and New York. The carrier also connected Edmonton-Calgary-San Francisco on a daily basis and served Edmonton-Calgary-Los Angeles on a twice daily basis. On both of the latter two routes, Air Canada was competing for traffic with a U.S. carrier, United Airlines and Western Airlines respectively. On all of these transborder routes, Air Canada flew Boeing 727 aircraft. Norcanair, the other Canadian carrier providing transborder service, was flying daily between Regina and Minneapolis using the Fokker F28 jet aircraft. A number of U.S. cities, namely, Bismarck, Dallas, Denver, Houston, Las Vegas, Minneapolis, Minot and Salt Lake City, were all directly linked to a Prairie centre by at least one flight a day, and in all cases, were served exclusively by an American carrier. During the past year, there have been a couple of changes with respect to these transborder markets. Northwest Orient Airlines increased its service between Winnipeg and Minneapolis to four flights per day and between Edmonton and Minneapolis to two flights per day. United Airlines has recently offered service between Calgary and Spokane replacing Cascade Airways.

Although the majority of the region's international traffic is directed through either Toronto or Vancouver, a number of international destinations were directly accessible from Edmonton and Calgary. Nevertheless, the majority of these international flights from Calgary or Edmonton originated in Vancouver.

As of August 1986, both CPAL and KLM Royal Dutch Airlines flew Vancouver-Calgary-Amsterdam twice per week, while CPAL was the sole carrier authorized to operate the routes Vancouver-Edmonton-Amsterdam (two flights per week) and Calgary-Edmonton-Amsterdam (one flight per week). Similarly, Air Canada, which offers three flights per week, competes for traffic with Lufthansa, which offers four flights per week, on the Vancouver-Calgary-Frankfurt route, while the Canadian carrier also offers twice weekly service

to that destination from Vancouver via Edmonton. Air Canada also provides non-stop service to London (Heathrow) from both Calgary (four flights per week) and Edmonton (three flights per week). Formerly offering only charter service, Wardair recently introduced twice weekly scheduled service to London (Gatwick) from Calgary and from Edmonton.

HISTORICAL MOVEMENT OF PRICES IN PRAIRIE REGION

Air fares observed in ten selected city pairs over the past three years in the Prairie Region are presented in Table 2.4. These city pairs cover the major centres within the Prairies and some major points in British Columbia which are connected by scheduled air services. Three fare types are reported for each city pair. They include two full fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definitions of these fare types are found in Part C of the Air Transport Monitor, Volume 2, Number 1.

The changes in the fares from 1983 to 1986 are as follows:

The modal full fares and the lowest full fares were identical in nine out of ten city pairs examined in 1983 and in only four of them in 1986. The modal full fares rose in all city pairs by approximately 20%. In nine city pairs lowest full fares increased between 2% and 20%, and in the Calgary-Edmonton market, it decreased by 20% as CPAL, in 1986, introduced a Special Economy fare in this market.

In nine out of ten city pairs examined, discounted fares increased significantly. In fact, on four routes the fares doubled. The average increase in discounted fares for these ten city pairs over the three-year period was 65%. However, it should be noted that in this region, 1983 is not the ideal base year as PWA introduced in May of 1983, its newly acquired larger aircraft (B-767s) on most of the routes examined here. This resulted in an increase in capacity which coincided with the period when airlines were starting to recover from the decline in traffic caused by the recession in 1982. Consequently, to increase sales, PWA offered promotional fares which were significantly lower than previous discount fares. These fares were matched by other carriers in these markets. If instead, 1984 is taken as the base year, the average increase in discounted fares over the two-year period for these ten city pairs is 35%.

Table 2.4

AIR FARES FOR SELECTED CITY PAIRS IN THE PRAIRIE REGION
May 15, 1983 - 1986
(Fares in current Canadian dollars)

City Pair	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
		Modal	Lowest	
Calgary-Edmonton				
1986	248	143	80	66
1985	248	136	112	75
1984	248	126	106	53
1983	248	119	100	77
Calgary-Winnipeg				
1986	1 191	406	346	223
1985	1 191	384	384	211
1984	1 191	356	284	146
1983	1 191	340	340	109
Edmonton-Winnipeg				
1986	1 187	406	346	223
1985	1 187	384	326	211
1984	1 187	356	356	178
1983	1 187	340	340	149
Calgary-Regina				
1986	661	288	288	158
1985	661	274	274	151
1984	661	254	254	104
1983	661	242	242	79
Vancouver-Winnipeg				
1986	1 862	560	560	308
1985	1 862	530	530	239
1984	1 862	490	488	198
1983	1 862	466	466	149
Calgary-Vancouver				
1986	685	292	292	99
1985	685	278	278	129
1984	685	258	258	104
1983	685	246	246	89

Table 2.4 (Cont'd)

City Pair	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
		Modal	Lowest	
Edmonton-Vancouver				
1986	808	324	324	158
1985	808	306	260	139
1984	808	282	282	122
1983	808	270	270	99
Saskatoon-Vancouver				
1986	1 206	410	348	226
1985	1 206	388	330	213
1984	1 206	360	288	146
1983	1 206	342	342	119
Calgary-Victoria				
1986	727	304	258	138
1985	727	288	244	139
1984	727	266	212	133
1983	727	254	254	99
Regina-Vancouver				
1986	1 332	438	372	241
1985	1 332	416	354	229
1984	1 332	384	308	156
1983	1 332	366	366	119

Notes : These fares do not include tax.

Definitions of these fare types are found in Section C of the Air Transport Monitor, Volume 2, Number 1.

Sources : ATPCO Passenger Tariff, 21 May 1986
 ATPCO Passenger Tariff, 15 May 1985
 ATPCO Passenger Tariff, 16 May 1984
 ATPCO Passenger Tariff, 18 May 1983

Official Airline Guide, 15 May 1986
 Official Airline Guide, 15 May 1985
 Official Airline Guide, 01 May 1984
 Official Airline Guide, 01 May 1983

Air carrier tariffs filed with the Air Transport Committee.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

Table 2.5 provides information on Canadian and U.S. domestic fares in the respective currencies of the two countries for selected city pairs in each country. City pairs in Canada and in the U.S. were selected on the basis of their similarity in terms of distance and traffic volume characteristics. With respect to the Canadian city pairs, the table focuses on the Prairie region (Manitoba, Saskatchewan and Alberta) and U.S. city pairs were also selected to the extent possible from a comparable geographic area, i.e. midwestern part of the country. Three fare types are reported for each city pair. They include two full adult fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definitions of these fare types are found in Part C of the Air Transport Monitor, Volume 2, Number 1.

In all the four Canadian city pairs examined in this section, the lowest full fares were below the modal full fares offered by the dominant carrier(s) (defined in terms of maximum non-stop flights per week). The discount ranged between 15% and 44%. However, in the U.S. city pairs, in two out of four city pairs examined, the modal full fares also represented the least expensive full fares. On the other two routes, namely Denver-San Antonio and Dallas-Oklahoma City, the lowest full fares were 24% and 28% respectively lower than the modal full fares.

In the Canadian market, the discounts from a full fare ranged from a high of 54% in the case of Calgary-Edmonton to a low of 45% in the Regina-Vancouver market. With regard to the U.S. city pairs examined, the comparable discounts ranged from 64% in the case of Burbank-Denver to a low of 11% in El Paso-Las Vegas market.

Table 2.5

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

(Canadian fares in current Canadian dollars,
U.S. fares in current U.S. dollars)

May 15, 1986

City Pair	1984 Passenger Volume*	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
			Modal	Lowest	
Calgary-Edmonton	367 900	248	143	80	66
Dallas-Oklahoma City	395 200	281	133	96	54
Edmonton-Winnipeg	97 330	1 187	406	346	223
Denver-San Antonio	92 300	1 780	343	259	128
Regina-Vancouver	79 000	1 332	438	372	241
Burbank-Denver	81 040	1 346	250	250	91
Edmonton-Victoria	65 600	862	338	288	158
El Paso-Las Vegas	64 170	937	122	122	109

Notes : * Includes commuter traffic.

These fares do not include tax.

Definition of these fare types are found in Section C of the Air
Transport Monitor, Volume 2, Number 1.

Sources : ATPCO Passenger Tariff, 21 May 1986

Official Airline Guide, 15 May 1986

Air carrier tariffs filed with the Air Transport Committee.

SCHEDULED AIR SERVICES IN THE ATLANTIC REGION

Once considered one of the more underserved regions of the country from the standpoint of competition, the Atlantic region has witnessed a major re-organization of scheduled air services over the past year. Recent events such as the takeover of Eastern Provincial Airways Ltd. by Canadian Pacific Air Lines (CPAL) along with the emergence of three new local carriers has resulted in a significant change not only in the degree of competition within the regional market but in the level of service provided.

This section provides a description of commercial air services in the Atlantic region³ for the third quarter of 1986. The analysis is carried out for the week of August 15-21 of 1986. In order to identify recent changes in air services, a comparison is also made with services offered during the same week in 1985. Figures 2.4 and 2.5 provide a graphic representation of scheduled air services operated in the Atlantic region during the week of August 15-21 in 1985 and 1986 respectively. Before proceeding to a discussion of the services shown in these figures, the following cautionary points must be made. First of all, the figures do not provide any indication either with regard to the frequency of the service between points or the number of carriers providing a connection between them. Thus, a connection provided once a week is shown in the same way as a service operated once a day. Similarly, a connection provided by a single carrier is depicted in the same way as a connection served by more than one carrier. Furthermore, all services between two points, except non-stop ones, may require a plane change or even a change in carriers, and this also is not shown in these figures. On the other hand, the direction of the services is shown; the absence of an arrow on a connection represents a service which is operated in both directions.

Scheduled air service, although in competition with other transport modes, constitutes an integral service to the Atlantic region. Due to its geographical position vis-a-vis the rest of Canada, the Atlantic region depends heavily on air transport, not only as an intercommunity link within the region, but also in providing connections with centres in Central Canada. In 1986, a total of seventeen communities in the Atlantic region received scheduled air services, six of which were situated in the Province of New Brunswick, five in Nova Scotia, four in Newfoundland, and one each in Prince Edward Island and Iles de la Madeleine. The total of seventeen is up by three from the previous year as scheduled service was introduced at St. Leonard, N.B., Port Hawkesbury and Digby, N.S. It is readily apparent from Figures 2.4 and 2.5 that Halifax serves as the major hub within the region having, as of August 1986, non-stop service to 13 other regional communities. Halifax also has non-stop service to Toronto (11 flights daily), Montreal (7 flights daily) and Ottawa (4 flights daily). In addition to Halifax, five other communities within the region have direct service to Toronto while four others have direct access to Montreal.

Table 2.6 lists some of the major points in the Atlantic regional network and the carriers serving the various city pairs with scheduled flights. It should be noted that the table includes only those carriers providing regularly scheduled service and therefore may not include all

Figure 2.4

SCHEDULED AIR SERVICES IN THE ATLANTIC REGION
For the Week of August 15-21, 1985

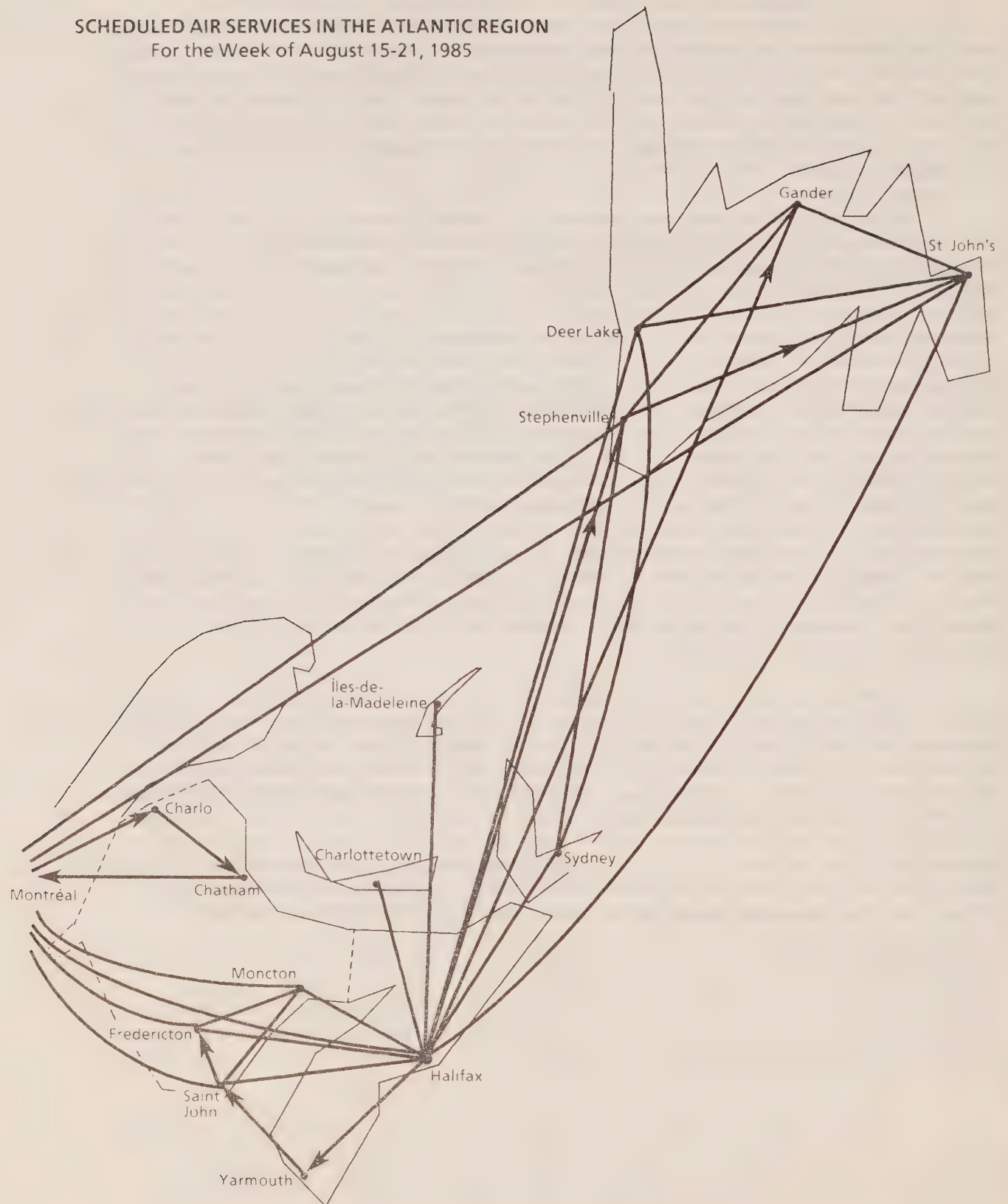


Figure 2.5

SCHEDULED AIR SERVICES IN THE ATLANTIC REGION
For the Week of August 15-21, 1986



Table 2.6

CANADIAN CARRIERS SERVING MAJOR POINTS IN THE ATLANTIC REGION

August 1986

<u>From:</u>	<u>To:</u>	<u>Halifax</u>	<u>Moncton</u>	<u>Saint John</u>	<u>St. John's</u>	<u>Sydney</u>	<u>Montreal</u>	<u>Ottawa</u>	<u>Toronto</u>
Charlottetown		AC, CP, CP*	5D			5D		AC	AC, CP
Fredericton		CP, CP*	CP*, 5D	AC, 5D			AC, CP		AC
Halifax			CP, CP*	AC, CP, CP CP*	AC, CP	AC, AC*, CP	AC, CP	AC, CP	AC, CP
Moncton				AC, CP*			AC		AC
Saint John							AC, CP		AC
St. John's							AC		AC, CP
Sydney								AC	

Legend :

- AC : Air Canada
- AC* : Air Nova
- CP : Canadian Pacific Airlines
- CP* : Air Atlantic
- 5D : Air Bras d'Or

Notes : With a direct flight on their regular services.

Source : Official Airline Guide, August 1986.

Level II and III carriers operating in short-haul markets. The table does, however, provide an indication as to the degree of competition in various city pair markets.

A total of five carriers provided scheduled air service in the Atlantic region during the third quarter of 1986. Table 2.7 provides a listing of the active carriers in 1985 and 1986, identifies the type of equipment operated by each of them and provides the estimated seating capacity for each type of aircraft. Among the carriers which provided scheduled services in the region in 1986 were two Level I operators and three Level III carriers. With respect to intra-regional service, Air Canada is the only carrier which provided scheduled service in 1985 and continued to do so in 1986. Eastern Provincial Airways and its subsidiary Air Maritimes which dominated the regional market in 1985 have since been taken over by CPAL. In addition, two new carriers, Air Nova, which is 49% owned by Air Canada and Air Atlantic, which is 20% owned by CPAL, commenced operations in 1986 and will provide feeder service for their senior affiliates. A third new carrier, Air Bras d'Or, has emerged in 1986 and intends to concentrate primarily on local traffic.

The basic characteristics of the Atlantic regional market are summarized in Table 2.8. Scheduled air services in the region as a whole expanded between the third quarter of 1985 and the third quarter of 1986 in that the number of city pairs served and the number of departures per week increased by 42.9% and 39.2% respectively. As an indication in the rise in the level of activity in the Atlantic region, ten new city pair markets benefitted from the introduction of scheduled services in 1986, while there were no city pairs which lost service. The city pair Deer Lake-St. John's, for example, which previously had been without non-stop scheduled service was, as of August 1986, being served by two carriers, Air Nova (12 flights per week) and Air Atlantic (11 flights per week). Furthermore, the number of carriers providing service in seven other city pair markets increased in 1986. One of these city pairs, Halifax-Sydney, was served by two carriers in 1985 and is now served by four carriers in 1986 while the number of departures between the two centres rose from 27 to 51 flights per week during the same period. There were no city pair markets within the Atlantic region in which the number of carriers offering scheduled service declined in 1986. The overall seating capacity for the region rose slightly, up 5.5% from the previous year and while the majority of this increase has been attributable to the local carriers it should be stated that both Air Canada and CPAL have expanded their services but at a lower rate. Meanwhile, the average seats per departure and the average stage length both dropped dramatically over the year down 25.0% and 10.4% respectively. This is due in large to the utilization of smaller aircraft on many of the regional routes. In particular, in 1985 EPA had provided service using exclusively Boeing 737 jet aircraft while in 1986 many of these routes are now operated by local carriers utilizing smaller turbo-prop equipment.

In the past few years, Canadian Pacific Air Lines (CPAL) has given a lot of expansion to its operations. In 1984, CP Air purchased the regional carrier of Atlantic Canada, Eastern Provincial Airways, and merged with that airline in 1986 forming CPAL. Previously, CP Air used to fly to about twelve destinations in Canada primarily in Western Canada, however, following the

Table 2.7

FLEET OF CANADIAN CARRIERS OPERATING SCHEDULED
SERVICES IN THE ATLANTIC REGION

1985 and 1986

<u>Canadian Carrier</u>	<u>Aircraft Type</u>	<u>Used 1985</u>	<u>In 1986</u>	<u>Estimated Seating Capacity</u>
<u>Level I</u>				
Air Canada	Lockheed L-1011	x		288
	Boeing 727-200	x	x	132
	Boeing 767	x	x	201
	McDonnell Douglas DC-9-30	X	X	102
Canadian Pacific Airlines	Boeing 737	x	x	109
	Hawker Siddeley 748		x	40
	DeHavilland DHC-7 Dash-7		x	50
Eastern Provincial Airlines Ltd.	Boeing 737-200	x		119
<u>Level II</u>				
Air Maritimes	Hawker Siddeley 748	x		40
Air Atlantic	DeHavilland DHC-7 Dash-7		x	50
Air Nova Inc.	DeHavilland DHC-8 Dash-8		x	37
Air Bras d'Or	DeHavilland DHC-6 Twin Otter		x	20

Table 2.8

SCHEDULED CARRIER ACTIVITY¹
WITHIN THE ATLANTIC REGION

<u>Regional Summary</u>	<u>1985</u>	<u>1986</u>	<u>% Change</u>
Carriers	3	5	66%
Airports Served	14	17	21.4%
City Pairs Served	21	30	42.9%
Departures per Week	577	803	39.2%
Seats per Week	51 080	53 897	5.5%
Seat-Km. per Week (x 1 000)	20 275	18 842	-7.1%
Average Seats per Departure	88.5	66.4	-25.0%
Average Stage Length (Km.)	339.6	304.2	-10.4%

<u>Carrier Shares</u>	<u>Departures</u>		<u>Seats</u>		<u>Seat-Kms.</u>	
	<u>1985</u>	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>	<u>1986</u>
Air Canada	20.62%	14.44%	28.67%	23.90%	37.23%	26.70%
Eastern Provincial	53.21%	--	59.50%	--	57.13%	--
Air Maritimes ²	26.17%	--	11.83%	--	5.64%	--
CPAL	--	32.63%	--	47.74%	--	52.47%
Air Atlantic ³	--	22.54%	--	17.35%	--	12.56%
Air Nova Inc. ⁴	--	10.96%	--	5.22%	--	5.75%
Air Bras d'Or Limited	--	19.43%	--	5.79%	--	2.52%

¹ Scheduled carrier data are for the weeks of August 15-21, 1985 and 1986.

² Air Maritimes operated under EPA designator code.

³ Air Atlantic operates under CPAL designator code.

⁴ Air Nova Inc. operates under Air Canada's designator code.

takeover of EPA, CPAL has added another twenty destinations in Eastern Canada.

In 1985, although it was in the process of being taken over by CPAL, Eastern Provincial Airways was dominating the Atlantic regional market. In August 1985, EPA had a 53.2% share in terms of departures and a 59.5% share in terms of seating capacity. If one includes its local feeder service affiliate, Air Maritimes, EPA's market position was all the more dominant accounting for a 79.4% and 71.3% share respectively. With the takeover completed in 1986, CPAL is now the largest carrier in the region in terms of market shares. With responsibility for serving many of EPA's former routes, CPAL, along with its affiliate feeder service Air Atlantic, are dominant in the Atlantic regional market in 1986. In the third quarter of 1986, CPAL alone, accounted for a 47.7% share of seating capacity and a 52.5% share of the total seat-kilometers flown. CPAL's regional routes fulfill the major functions of carrying the local traffic and of feeding passengers to the carrier's domestic and international network. CPAL's Atlantic Canada route network tends to radiate from its regional base in Halifax. The carrier provides service between that center and other regional destinations including St. John's (four times daily), Sydney (twice daily) and Charlottetown (once daily), as well as between Halifax and Central Canada destinations namely: Toronto (five flights daily), Montreal (three flights daily) and Ottawa (twice daily). In addition, CPAL also flies a daily service to Toronto from St. John's and daily to Montreal from both Fredericton and from Saint John. Most city pairs are served by Boeing 737 equipment although the carrier does provide daily service between Halifax and Iles de la Madeleine and between Halifax and Moncton using DeHavilland Dash-7 turbo-prop equipment.

Concurrent with the objective of building a national competitive entity, CPAL has also decided to feed its national route network through commercial arrangements or minority interests in smaller turbo-prop feeders. These feeders are tied into CPAL's electronic reservation system so that passengers can make connections to its worldwide network. In return, in addition to the traffic it generates for the local carrier, the arrangement allows for that local to participate in CPAL's fare incentive programs. Air Atlantic, which is 20% owned by CPAL, acts as the main Atlantic feeder for the larger airline. Based in St. John's Newfoundland, its turbo-prop service flies DeHavilland 50 passenger Dash-7 aircraft although it plans to replace them with the more efficient Dash-8 aircraft in the very near future. The use of smaller aircraft will ultimately allow Air Atlantic greater flexibility in terms of scheduling and should enable it to offer more frequent service and thereby attract customers, particularly business travellers, by offering same day round service. The commuter airline offers scheduled service to twelve Atlantic destinations including: twice daily non-stop service (except weekends in which there is daily service) between St. John's and Deer Lake Nfld., twice daily service connecting Halifax with Saint John, Fredericton and Moncton, and daily service between Halifax and Stephenville. The airline also announced its intention to expand into the transborder market early next year by introducing a route connecting Atlantic Canada with the U.S. cities of Bangor, Portland and Boston. As of August 1986, Air Atlantic's share of the Atlantic regional market in terms of departures was 22.5% and in terms of seating capacity 17.4%. If one

considers the combined market shares of CPAL and Air Atlantic, CPAL's position in the Atlantic region is all the more dominant accounting for roughly 65% of the total seating capacity and the total seat-kilometers travelled. The association of CPAL and Air Atlantic should serve to strengthen their respective positions in the marketplace.

Air Canada, along with its feeder service Air Nova, provides most of the competing services to CPAL and its affiliate Air Atlantic. For the most part, Air Canada in 1986, is offering basically the same regional services that it did in 1985, providing significant frequency on most city pair routes, and using primarily McDonnell Douglas DC9 and Boeing 727 jet aircraft. As was the case with CPAL, Air Canada's regional routes are designed not only to carry local traffic but primarily to feed passengers through to long-haul destinations on the carrier's network. In 1986, Air Canada introduced its own daily service between Halifax and Charlottetown in competition with CPAL service.

At first glance, it would appear from Table 2.8 that Air Canada's regional market share dropped significantly during the past year yet the carrier had maintained its service levels. Despite the fact that Air Canada's market share was down (in terms of departures, capacity and seat-kilometers flown), the impact of Air Nova should be appreciated. Providing scheduled service on many short-haul lower density routes, Air Nova serves as Air Canada's feeder airline in the Atlantic region. Consequently, if one were to consider the combined market shares of Air Canada and its affiliate Air Nova, Air Canada share in 1986 has actually increased in terms of departures and seating capacity. Only the combined share in terms of seat-kilometers is down from Air Canada's share of a year ago which can be explained in part by the use of smaller aircraft on certain lower density routes.

Air Nova Inc., started operations on July 14, 1986. Owned 49% by Air Canada, the local commuter airline serves primarily as an Eastern Canada feeder service for that national airline. With its head office in St. John's and base of operation in Halifax, Air Nova operates two 37 seat DeHavilland Dash-8 aircraft. Among its services, the carrier flies four times daily between Halifax and Sydney, twice daily between Deer Lake and St. John's as well as daily between St. John's and Goose Bay and between Deer Lake and Halifax. A service unique to the new airline is an airport connector service which takes passengers free of charge from Deer Lake airport to Corner Brook. During the third quarter of 1986, the local airline accounted for 11% total departures and 5.2% of total seating capacity. By year-end Air Nova plans to expand its route network to include Charlottetown, Moncton, Saint John, Yarmouth and Fredericton.

A third local carrier, Air Bras d'Or Limited, had just started operations as of August 1986. A division of Air-Dale Limited of Sault Ste. Marie, Air Bras d'Or is operating two 20 seat DeHavilland Twin Otters. Whereas the other two locals essentially provide a feeder service to their parent companies, Air Bras d'Or intends to provide the Atlantic region with a truly local service. With one plane stationed at its base in Sydney, Nova Scotia and another in Charlo, New Brunswick, the carrier provides daily service (except Sundays) between the communities of Charlo, Saint Leonard,

Fredericton, Saint John, Digby, Halifax, Port Hawkesbury, Sydney, Charlottetown and Moncton. During the third quarter, Air Bras d'Or accounted for nearly 20% of total departures and 5.8% of total seating. The fact that the carrier accounted for only 2.5% of the region's total seat-kilometers is indicative of its concentration on local short-haul markets.

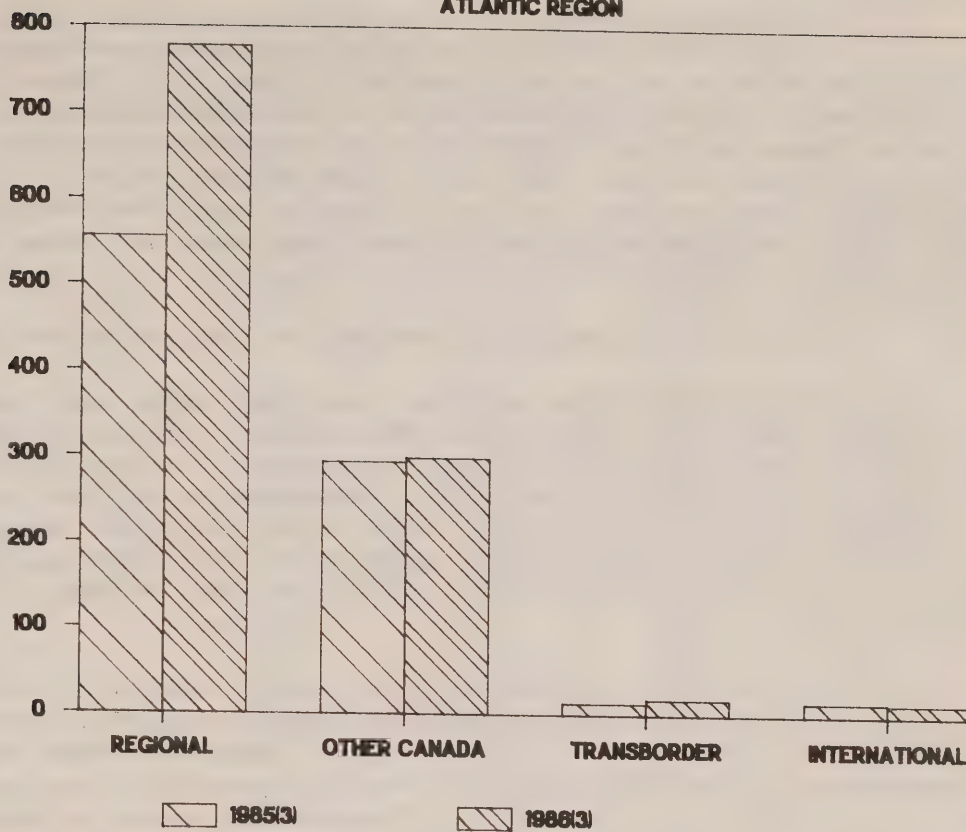
An analysis of air services in the Atlantic region must also include a discussion of links with the rest of the world. Figure 2.6 summarizes the level of activity of scheduled carriers offering services to points beyond the Atlantic region. As is to be expected the majority of scheduled services link the region with international destinations via the major Central Canadian centres of Toronto and Montreal as traffic is fed through both CPAL and Air Canada's national and international route networks. Nevertheless, both CPAL and Air Canada offered some direct scheduled services to international destinations from points within the Atlantic region. In 1986, Air Canada introduced two daily transborder services to Boston using McDonnell Douglas DC9 equipment, one service originating in Saint John, N.B., the other in Yarmouth, N.S. In terms of overseas destinations, Air Canada, as of August 1986, offered three non-stop flights per week between Halifax and Glasgow (Prestwick), Scotland and one non-stop flight per week between Halifax and London (Heathrow), England. In addition, the carrier flies three times weekly Halifax-St. John's-London replacing the former service Halifax-Gander-London which has been discontinued. On these overseas flights, Air Canada uses primarily Boeing 767 jet aircraft. CPAL provides daily service between Halifax and the Island of St. Pierre and Miquelon using Hawker Siddeley 748 turbo-prop aircraft. The carrier also connects Toronto-Halifax-Amsterdam with one flight per week during peak season using McDonnell Douglas DC10 jet aircraft.

Figure 2.6

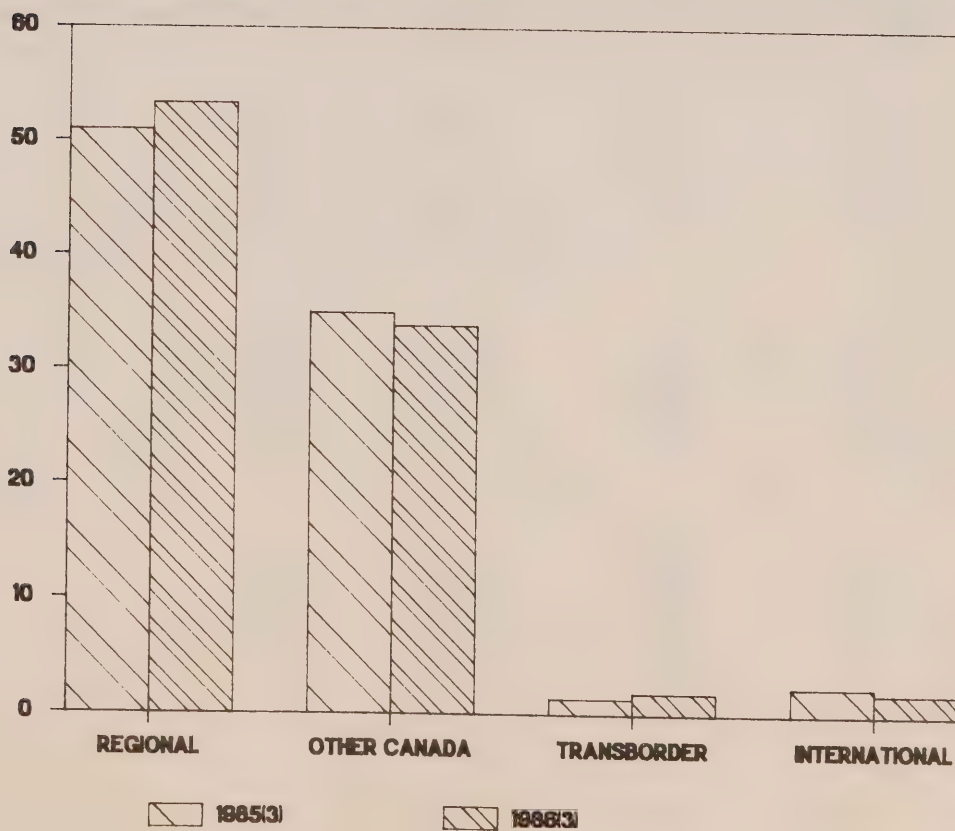
SCHEDULED AIR SERVICES

ATLANTIC REGION

DEPARTURES PER WEEK



SEATS PER WEEK (Thousands)



HISTORICAL MOVEMENT OF PRICES IN ATLANTIC REGION

Air fares observed in 15 selected city pairs over the past three years in the Atlantic region are presented in Table 2.9. These city pairs cover the major centres within the Atlantic provinces and some major points in Central Canada which are connected by scheduled air services. Three fare types are reported for each city pair. They include two full fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definition of large fare types are found in Part C of the Air Transport Monitor, Volume 2, Number 1.

The changes in the fares from 1983 to 1986 are as follows:

The modal full fares and the lowest full fares were identical in all of the 15 city pairs examined in 1983 and in 13 of them in 1986. In 13 city pairs both type of full fares increased at an identical rate over this three-year period. The modal full fares rose in all city pairs by approximately 20%. The lowest full fares in two city pairs namely Saint John-Toronto and Moncton-Montreal dropped by 7%. This was due to the introduction of a lower economy fare by CPAL in 1986, offered on other than non-stop flights.

With respect to discounted fares, the situation is quite different. Ten of the 15 city pairs examined in this region are within the Atlantic provinces. On five routes out of these ten, discounted fares declined, the decrease ranging from 15% to 25%; in four city pairs the fares increased marginally by 1% to 6%; on the Gander-Stephenville route, it increased by 13%. However, with regard to the five routes between points in the Atlantic region and centres outside the region, discounted fares increased substantially. This is the opposite of the situation with respect to the routes examined in the previous issue (Central Canada), namely Toronto-Halifax, Montreal-Halifax, Toronto-St. John's and Ottawa-Halifax, which experienced significant drops in the discounted fares.

Table 2.9

AIR FARES FOR SELECTED CITY PAIRS IN THE ATLANTIC REGION
May 15, 1983 - 1986
(Fares in current Canadian dollars)

City Pair	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
		Modal	Lowest	
Halifax-Sydney				
1986	305	206	206	80
1985	305	196	196	108
1984	305	180	180	90
1983	305	172	172	99
Halifax-Fredericton				
1986	260	196	196	80
1985	260	186	186	102
1984	260	172	172	86
1983	260	164	164	107
Halifax-Saint John				
1986	192	180	180	80
1985	192	170	170	94
1984	192	158	158	79
1983	192	150	150	98
Halifax-Charlottetown				
1986	158	170	170	80
1985	158	162	162	89
1984	158	150	150	75
1983	158	144	144	94
Halifax-St. John's				
1986	879	338	338	158
1985	879	320	320	176
1984	879	296	296	148
1983	879	282	282	149
Stephenville-Sydney				
1986	286	202	202	111
1985	286	192	192	106
1984	286	176	176	88
1983	286	168	168	109

Table 2.9 (Cont'd)

City Pair	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
		Modal	Lowest	
Saint John-Fredericton				
1986	79	156	156	86
1985	79	148	148	81
1984	79	136	136	68
1983	79	130	130	85
Deer Lake-Sydney				
1986	393	202	202	111
1985	393	192	192	106
1984	393	176	176	88
1983	393	168	168	109
Gander-St. John's				
1986	204	182	182	80
1985	204	172	172	95
1984	204	160	160	80
1983	204	152	152	99
Gander-Stephenville				
1986	296	204	204	112
1985	296	194	194	107
1984	296	178	178	89
1983	296	170	170	99
Saint John-Toronto				
1986	1 104	390	302	198
1985	1 104	368	368	202
1984	1 104	340	340	170
1983	1 104	324	324	149
Fredericton-Toronto				
1986	1 060	382	382	210
1985	1 060	360	360	198
1984	1 060	332	332	166
1983	1 060	316	316	149

Table 2.9 (Cont'd)

City Pair	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
		Modal	Lowest	
Moncton-Toronto				
1986	1 205	410	410	198
1985	1 205	388	388	213
1984	1 205	360	360	180
1983	1 205	344	344	149
Moncton-Montreal				
1986	705	298	232	164
1985	705	282	226	155
1984	705	262	262	131
1983	705	250	250	99
Charlottetown-Toronto				
1986	1 327	440	440	242
1985	1 327	418	418	230
1984	1 327	386	386	193
1983	1 327	368	368	149

Notes : These fares do not include tax.

Definitions of these fare types are found in Section C of the Air Transport Monitor, Volume 2, Number 1.

Sources : ATPCO Passenger Tariff, 21 May 1986
ATPCO Passenger Tariff, 15 May 1985
ATPCO Passenger Tariff, 16 May 1984
ATPCO Passenger Tariff, 18 May 1983

Official Airline Guide, 15 May 1986
Official Airline Guide, 15 May 1985
Official Airline Guide, 01 May 1984
Official Airline Guide, 01 May 1983

Air carrier tariffs filed with the Air Transport Committee.

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

Table 2.10 provides information on Canadian and U.S. domestic fares in the respective currencies of the two countries for selected city pairs in each country. City pairs in Canada and in the U.S. were selected on the basis of their similarity in terms of distance and traffic volume characteristics. With respect to the Canadian city pairs, the table focuses on the Atlantic region (Newfoundland, Nova Scotia, Prince Edward Island and New Brunswick) and U.S. city pairs were also selected to the extent possible from a comparable geographic area, i.e. from the eastern part of the country. Three fare types are reported for the each city pair. They include two full adult fares, the modal and the lowest-priced, and one discounted fare, the lowest-priced non-status fare. Detailed definitions of these fare types are found in Part C of the Air Transport Monitor, Volume 2, Number 1.

In three out of the four Canadian city pairs examined in this section, the modal full fares offered by the dominant carrier(s) (defined in terms of maximum non-stop flights per week) also represent the least expensive full fares. On the one Canadian route where this is not the case, namely Deer Lake-St. John's, the lowest full fare was 78% of the full fare offered by the dominant carrier. On the two U.S. routes where this situation occurs, namely Boston-Indianapolis and Boston-Dayton, the lowest full fares amount to 37% and 61% respectively of the dominant carrier's full fares. In the other two U.S. city pairs modal full fares and lowest full fares were identical.

With regard to the lowest non-status discounted fares, these were substantially lower than the full fares available from the dominant carrier in all the Canadian and U.S. city pairs examined. In the Canadian market, the discounts ranged from a high of 61% in the case of Halifax-Sydney to a low of 45% in the case of Deer Lake-St. John's market. In the U.S., comparable discounts ranged from 78% in the case of Boston-Indianapolis to a low of 31% in the Martha's Vineyard-New York market.

Table 2.10

A COMPARISON OF CANADIAN AND U.S. DOMESTIC AIR FARES

(Canadian fares in current Canadian dollars,
U.S. fares in current U.S. dollars)

May 15, 1986

City Pair	1984 Passenger Volume*	One-Way Distance (km)	Return Full Fares		Discounted Lowest Non-Status Return Fare
			Modal	Lowest	
Halifax-Sydney	38 200	305	206	206	80
Martha's Vineyard- New York	38 195	282	202	202	139
Deer Lake-St. John's	27 300	386	254	198	140
Baltimore-Islip/ Long Island	29 122	354	180	180	91
Moncton-Toronto	56 300	1 205	410	410	198
Boston-Indianapolis	51 690	1 315	491	183	109
Fredericton-Toronto	41 400	1 060	382	382	210
Boston-Dayton	44 920	1 141	300	183	91

Notes : * Includes commuter traffic.

These fares do not include tax.

Definition of these fare types are found in Section C of the Air
Transport Monitor, Volume 2, Number 1.

Sources : ATPCO Passenger Tariff, 21 May 1986

Official Airline Guide, 15 May 1986

Air carrier tariffs filed with the Air Transport Committee.

Part II Footnotes

¹ A discussion of scheduled air service to the northern and remote areas of these provinces (i.e.: the area north of a diagonal line which extends from the intersection of the 50th parallel with the Ontario-Manitoba border to the intersection of the 53rd parallel with Manitoba-Saskatchewan border, and continuing to the intersection of the 55th parallel with the Alberta-Saskatchewan border and along the 55th parallel to the British Columbia-Alberta border) appeared in the previous issue of the Air Transport Monitor.

² It should be noted however that the market shares are highly skewed because of PWA's dominance in the Calgary-Edmonton route. Elsewhere in the region, PWA and Air Canada are about equal.

³ The Atlantic region is comprised of the provinces of New Brunswick, Nova Scotia, Prince Edward Island and the Island of Newfoundland. Air service to Labrador was discussed in the previous issue (ATM, Vol. 2, No. 3). Due to their geographic position, Iles de la Madeleine have been included in the Atlantic region even though they are part of the Province of Quebec.

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Air Transport Monitor:

Project Final Report

**AIR TRANSPORT MONITOR:
PROJECT FINAL REPORT**

**CANADIAN TRANSPORT COMMISSION
Research Branch
February 1987**

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1.0 BACKGROUND

The quarterly report 'Air Transport Monitor' (ATM) was published for the first time in 1985 by the Research Branch of the Canadian Transport Commission and the final issue was published in October 1986. The objectives of this experimental publication were: to collect and disseminate, in a timely manner, relevant information on prices, service levels and air carrier operations, under a policy of regulatory reform (New (1984) Canadian Air Policy); to be of assistance to the public discussion of a pro-competitive orientation for air carrier services in Canada; and to provide a good basis for an objective assessment of the impact of the New Policy after an appropriate amount of time has elapsed.

The first four issues of the ATM, Volume I, concentrated on four areas. Part A reviewed Air Transport Committee decisions relative to the licence authorities of Level I, II and III air carriers. Part B detailed scheduled air carrier activity at airports in Canada as well as provided an index of service convenience. Part C presented information relative to pricing in both the Canadian and the U.S. domestic markets. Part D reported on domestic scheduled and charter air traffic levels and also provided a comparison of the domestic yields of Canadian and U.S. carriers. The occasional papers reported on the results of work carried out within the Research Branch with the exception of the paper in Vol. 2, No. 1 on a classification of hubs for Canada which was specifically prepared for the ATM. The issues in Volume 1 placed emphasis on timely statistical data (maximum six month data lags), with minimal explanatory text.

Volume 2, Number 1 of the ATM initiated a brief analysis at the beginning of Sections A, B, C, and D showing the trends and highlights of the Canadian air transport industry during the quarter under study. Beginning with Volume 2, Number 2, several major changes were introduced to the format of the ATM. The purpose of these changes was to turn the Monitor away from being primarily a data source into a more analytical document which provided the reader with a concise explanation of what was happening in the Canadian airline industry. The new format of the ATM concentrated on two areas. Part 1 presented a broad snapshot of the industry by providing infor-

mation and analysis on traffic, capacity, prices and operating performance of Level I Canadian airlines. As part of the examination of price movements, domestic and transborder air fare indices were specially developed for the ATM and a special feature on data and methodology for these indices was also prepared for issue two. Part II provided a detailed examination of scheduled service and prices in a specific domestic market. For this purpose Canada was divided into five distinct geographic regions, namely, Atlantic, Central (Quebec and Ontario), Prairies, Pacific (British Columbia) and Northern. Issue Number 2 focused on the Pacific, Number 3 on the Central and Northern, and Number 4 on the Atlantic and Prairies.

The ATM was mailed to about 400 readers covering many interest groups such as airlines, Federal departments, Members of Parliament, Provincial Governments, Universities, Associations and others such as consultants, free-lance journalists, etc., (see Table 1).

2.0 OBJECTIVE

The objective of this report is to prepare a final evaluation of an experimental project--Air Transport Monitor. This evaluation covers an assessment of the views of the recipients of this publication which were obtained by a readership questionnaire that was sent out with Volume 2, Number 4 as well as an assessment of the financial and manpower resources required by such a topical up-to-date publication.

3.0 VIEWS OF READERS

Out of some 400 readership questionnaires sent out, 53--or 13%--were returned. However, the returned questionnaires reflect the views of more than 13% of the readers. The major organizations which were sent questionnaires responded. These included the Air Transport Association of Canada (ATAC), the Consumers' Association of Canada, the Tourism Industry Association of Canada, the Canadian Air Line Flight Attendant's Association and the Air Transport Association of America. The responses of these associations obviously represent the views of large number of their members. Similarly, most Federal and Provincial departments sent a single response rather than a response per individual receiving the Monitor.

Table 1

**MAILING LIST OF THE
AIR TRANSPORT MONITOR**

Distribution Breakdown:	Number
Carriers	107
Federal Government	23
House of Commons	40
Canadian Transport Commission	40
Transport Canada	31
Provinces	28
Libraries	16
Universities	25
Associations and Orangizations	18
Other	70
	<hr/>
	398

The questionnaire requested information on the content of the publication, on format and on administrative aspects, i.e., if the user is willing to pay. The questionnaire is attached at the end of this report. The main observations of answers to each question are summarized as follows:

3.1 Usefulness of Specific Section of the ATM: Question 1

With regard to specific sections of the latest issue (Vol. 2, No. 4) the largest number of respondents selected the market analysis and pricing sections as being most useful. This was followed by regional analysis. However, more than half of the recipients picked a number of sections.

3.2 Usage of the information in the ATM: Question 2

In terms of the use of the ATM data, responses covered overall planning, monitoring air carrier performance, market planning, media articles (in Canada and outside Canada), background material for regulatory work, tourism intelligence report and so on. There was no clear pattern. The information was used for a wide variety of purposes. For example, ATAC feels that the ATM "has been the principal source of data enabling judgements to be made on the effects of liberalized route entry and pricing." This is confirmed by responses from the Canadian Air Line Flight Attendants' Association which selected information from the ATM "to keep union officers informed and knowledgeable in their dealings with Government and employers"; the Tourism Industry Association which used the information "to determine the rate of growth in domestic and transborder air travel, plus the general health of the industry"; and the Consumers' Association which used this information "to advise the public".

3.3 Other Information in the ATM: Question 3

No common patterns emerged in response to this question. Almost all the respondents asked for additional materials to be included. Three asked for cargo data and some additional information on the international sector. Other suggestions regarding additional information covered commuter level traffic, information on Level III and IV carriers, bankruptcies, ownership/joint marketing and its effect on services and fares, etc. For example, the Consumers' Association would like a list of carriers, their size and data regarding airline safety, and the Canadian Air Line Flight Attendants' Association would like "legislative summary (in lay persons' terms) of new laws affecting air carrier activity and financial information by carrier".

3.4 Preference for Statistical Data or Analysis: Question 4

With regard to format (emphasis on statistical data versus analysis) close to half of the respondents preferred Volume 2 (analytical) and one-third preferred both Volume 1 and Volume 2 (statistical and analytical).

The response from the Air Transport Association of America (ATA) stated: "the Statistical data is most important to me but descriptive sections are probably more valuable to other readers here at ATA." The ATM is kept in ATA's library "as a basic document on air transport matters in Canada".

3.5 In Favour of the ATM and If So, Its Frequency: Question 5

Only two out of 53 respondents felt that the ATM should be discontinued and an overwhelming majority preferred quarterly publication. All associations felt it should be continued—quarterly.

3.6 Timeliness of the Data Reported: Question 6

Well over half of the respondents indicated that the timeliness was extremely important and only a few were willing to accept an additional one or two quarters lag in data.

3.7 Readers Willingness to Pay: Question 7

Over half of the respondents said that they would be willing to pay between \$5 and \$25 per issue and 17 respondents said they would not pay for it. All Canadian associations indicated a willingness to pay for such a publication but the ATA which uses it as reference material said that it would "probably not" be willing to pay.

4.0 ASSESSMENT OF RESOURCE REQUIREMENTS FOR THE ATM

A topical up-to-date quarterly publication such as the ATM is expensive both in terms of financial and manpower resources. Such a publication requires the most recent and frequently interim data which have to be processed from scratch. It was also published in both official languages without help of the Translation Services of the CTC due to the time constraint.

With regard to manpower resources, there is a rather steep learning curve associated with a document such as the Air Transport Monitor. The last issue of Volume 1 was only half as costly to produce as the first issue. Similarly, the last issue of Volume 2 cost about 36% less than the second issue of this Volume*. The high costs of changing the format and content of such a publication is also demonstrated by the fact that the second issue of Volume 2 was approximately 32% more expensive to produce than the last issue of Volume 1. As has been indicated earlier, the format of Volume 2 was different from Volume 1 with more emphasis being placed on analysis and description in the latter. In contrast, Volume 1 was basically a statistical digest containing only a few explanatory notes. The problem of the steep learning curve was compounded by the very high turn-over rate of staff working on this project due to the general uncertainty surrounding the future of the Research Branch and the priority given to Economic Regulatory Reform activities. For example, there have been a number of instances where individuals have worked on only one or two issues of the Monitor before leaving the Branch or re-deployment to other tasks.

*For Volume 2 the comparison is based on Number 2 instead of Number 1 as a new format was introduced in Number 2.

The experience of the Research Branch with the ATM has shown that once the staff become familiar with data sources and the format of the publication, and once the methodology is developed, manpower costs can be significantly reduced. By the same token, an attempt to meet the various needs of the readers--as indicated in the readership survey--becomes prohibitively expensive in view of the learning and start-up costs.

While a monitoring activity in some form or another will undoubtedly have to be carried out by the Federal government either at the National Transport Agency or Transport Canada or both, substantial savings could be achieved by not issuing a publication such as the ATM. This is because the monitoring activity itself would only involve the collection of data and there would not be any dissemination of information to outside user groups by means of a regular publication. Internal staff would do the analysis as required. Consequently, such monitoring activity would not require the writing-up of analysis, translation and all the other costs such as editing, graphics, word-processing, printing and mailing. Using Volume 2, Number 4 (final issue) as a sample, we have estimated that if the ATM is not published, the cost of the monitoring activity to the Research Branch would decrease by 30-40%.

R

QUESTIONNAIRE

1. Quelles sections du présent numéro du Suivi du transport aérien vous ont été les plus utiles? Pourquoi?
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2. De quelle façon avez-vous utilisé l'information contenue dans le Suivi?
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3. Quelle information supplémentaire souhaiteriez-vous voir inclure dans le Suivi?
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4. Préférez-vous qu'une attention accrue soit portée à la publication de données statistiques (comme c'était le cas dans le premier volume) ou à la description et à l'analyse des nouveaux développements (comme dans le second volume)?
.
.
5. Etes-vous en faveur de la publication d'un Suivi du transport aérien? ____ Si oui, quelle devrait être sa fréquence de publication:

Trimestrielle	Annuelle	
Semi-annuelle	Autre	_____
		précisez
6. Quelle importance accordez-vous à avoir l'information la plus récente possible rapportée dans le Suivi? Est-ce que cela ferait quelque chose si l'information portait sur un ou deux trimestre(s) antérieur(s)?
.
.
7. Seriez-vous prêt à payer pour recevoir une telle publication? ____
Si oui, combien? ____

STL-VOUS-PLAÎT, RETOURNEZ AU:

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Direction de la Recherche
Commission Canadienne des Transports
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